2017 Seventh Grade STAAR Final Review

Sample questions with each objective

Grouped by reporting category

Questions taken from 2015 7th grade STAAR, other previous 7th and 8th grade STAARs, TAKS, HMH ExamView, and other assorted problems

2017: 40 total questions + research questions

Part I: Computation and Algebraic Relationships (15 STAAR questions)

Part II: Geometry and Measurement (12 STAAR questions)

Part III: Probability and Numerical Relationships (6 STAAR questions)

Part IV: Data Analysis and Personal Financial Literacy (7 STAAR questions)

STAAR Day Reminders

Sample Griddable

Name:

Category 2: Number of Questions:	Computation and Algebraic Relationships 15
Readiness Standards:	7.3b (Problems with all four operations with rational numbers)
(Will be on STAAR)	7.4a (Constant rate of change in all forms, including $d = rt$)
	7.4d (Rates, ratios, percents, % increase, % decrease)
	7.7a (Linear relationships in 4 forms, $y = mx + b$)
	7.11a (Two-step equations and inequalities)
Supporting Standards	7.3a (All four operations with rational numbers)
(Might be on STAAR)	7.4b (Calculate unit rates)
	7.4c (Constant of proportionality in real-world problems, $k = \frac{y}{x}$)
	7.10a (Write one- and two-step equations and inequalities)
	7.10b (Represent one-/two-step equations/inequalities on number lines)
	7.10c (Write real-world problems for a one-/two-step equation/inequality)
	7.11b (Determine if a value makes a one-/two-step equation/inequal. true)

	A recipe calls for $2\frac{1}{4}$ cups of flour to make a batch of cookies. How many batches					
1. 7.3a	of cookies can be made if you have $15\frac{3}{4}$ cups of flour?					
	А	6	С	8		
	В	7	D	$37\frac{31}{32}$		
2.	Irene bought 3 yards of fabric and a spool of thread for \$28.10. If the spool of thread cost \$1.25, how much did the fabric cost per yard?					
7.3 a	A B	\$8.95 \$9.37	C D	\$26.85 \$28.10		
	The list be	elow shows the	distance Pedro	jogged each day last week.		
3. 7.3a			2.3, $1\frac{3}{4}$, $2\frac{1}{2}$,	, 2, 1.8, 2.6, $1\frac{3}{4}$		
	What was	the total distant	ce Pedro jogged	d last week?		

4. 7.3a	 Roland sold candy bars for a school fund-raiser during three weeks. Some information about Roland's candy bar sales is provided below. Roland sold 26 candy bars the first week. The number of candy bars he sold during the second week was 4 less than 2 times the number of candy bars he sold during the first week. The number of candy bars he sold during the third week was 6 more than 1¹/₂ times the number of candy bars he sold during the second week. What was the total number of candy bars Roland sold during the three weeks? A 145 B 152 C 156 D 142 	
2015 STA AR 7.3b	The 17 students on the math team want to raise \$483.62 to buy practice books.They have already raised \$218.25. If each student raises the same amount, howmuch more money must each student raise?A \$15.61B \$12.84C \$28.45D \$41.29	
5. 7.3b	Mrs. Gutierrez bought 2 dozen cans of soda priced at 6 cans for \$1.98 and 18 bottles of water priced at 6 bottles for \$2.16. What is the total amount she spent, not including tax, on soda and bottled water? A \$6.48 C \$7.92 B \$14.40 D \$16.56	
6. 7.3b	Mr. Mangham asked each of his 30 students to select their favorite radio station. $ \frac{1}{3} \text{ chose station A} \\ \frac{1}{5} \text{ chose station B} \\ \text{All the rest chose station C} \\ \text{How many students chose station C?} \\ \text{A 10 B 14 C 6 D 4} $	
7. 7.3b	A 24,000 gallon pool is being filled at a rate of 40 gallons per minute. At this rate, how many minutes will it take to fill this pool $\frac{3}{4}$ full? A 450 min. B 560 min. C 600 min. D 150 min.	

8.	Mrs. Rodriguez will make name tags for each of the 45 choir members and 30 orchestra members. The materials for each name tag cost \$0.44. What is the total cost of the materials Mrs. Rodriguez will use to make these name tags?					
7.3b	A \$33.00 C \$75.00					
	B \$58.20 D \$49.80					
	At a restaurant, 42 people had breakfast on Saturday morning.					
	• $\frac{1}{7}$ of the people at eggs only.					
	• $\frac{2}{2}$ of the people ate both pancakes and eggs.					
9. 7.3b	 The remaining people ate pancakes only. 					
	What fraction represents the number of people who ate pancakes only?					
	A B B C 17 D 17					
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
	Karen had 2 spools of wire. Each spool had $15\frac{7}{8}$ yards of wire. Karen used 3					
	yards of wire from each spool. How many yards of wire were left on the spools?					
10.	A $41\frac{5}{8}$ yards, because $\left(15\frac{7}{8}-2\right) \bullet 3 = 41\frac{5}{8}$					
7.3b	B $10\frac{7}{12}$ yards, because $\left(15\frac{7}{8} \cdot 2\right) \div 3 = 10\frac{7}{12}$					
	C $25\frac{3}{4}$ yards, because $\left(15\frac{7}{8}-3\right) \cdot 2 = 25\frac{3}{4}$					
	D $10\frac{15}{16}$ yards, because $\left(15\frac{7}{8} \div 2\right) + 3 = 10\frac{15}{16}$					
	And rew plays on a basketball team. In two games he scored $\frac{2}{5}$ of the total number					
11. 7.3b	of points his team scored. His team scored 55 points in the first game and 35 points in the second game. What was the number of points Andrew scored in these two games?					
	A 18 B 20 C 36 D 90					





	The graph shows the distance a boat is traveling over time. Does the boat travel at a constant or variable speed? How fast is the boat traveling?						
15. 7.4a	A constant speed; 17.5 mi/h B constant speed; 70 mi/h 50 40 40 40 40 40 40 40 4						
	A car moving at a constant speed travels 78 feet in 2 seconds. How many feet will it travel in 60 seconds?						
16. 7.4a	A 136 f C 4680 ft B 2340 ft D 9360 ft						
17. 7.4b	A recipe that makes 18 cookies calls for $\frac{3}{4}$ cup of sugar. How much sugar is needed to make 2 dozen cookies using this recipe?						
18.	A can of juice contains 175 calories per 2.5 servings. Which of the following is NOT an equivalent number of calories per serving?						
7.4b	A280 calories per 4 servingsC525 calories per 8 servingsB910 calories per 13 servingsD630 calories per 9 servings						
	A carpenter lays 16 square feet of tile in $\frac{2}{3}$ of an hour. How many square feet of						
19	tile does the carpenter lay per hour?						
7.4b	A 24 square feet per hour C $\frac{32}{3}$ square feet per hour						
	B $16\frac{2}{3}$ square feet per hour D $\frac{1}{24}$ square feet per hour						

2015 STA AR	The cost of 3 pounds of grapes is \$6.57. What is the constant of proportionality that relates the cost in dollars, y , to the number of pounds of grapes, x ?							
7.4c	4c A 6.57 B 3 C 2.19 D Not here							
	The data set below proportionality.	w represents a direct variation. Identify the constant of x 1 2 3 4 5 6 7						
		$\frac{9}{27}$ $\frac{9}{18}$ $\frac{45}{27}$ $\frac{63}{63}$						
20. 7.4c								
	A $\frac{2}{9}$	$C = \frac{9}{2}$						
	B 9 Tell whether the re	D 2 relationship is a proportional relationship. If so, give the constant						
	of proportionality.							
21. 7.4c		$ \begin{array}{c} 50 \\ 40 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$						
	 A The relationship is proportional. The constant of proportionality is 2.5. B The relationship is proportional. The constant of proportionality is 5. C The relationship is proportional. The constant of proportionality is 20. D The relationship is not proportional. 							
2015 STA	Amanda increased what percentage d	d the amount of protein she eats every day from 48 g to 54 g. By did Amanda increase the amount of protein she eats?						
AK 7.4d	A 11.1%	B 88.9% C 112.5% D 12.5%						

	There were 25 questions on the science test. Here were the number correct for 5							
	Fred 21, Wilma 23, Barney 22, Betty 19, Bamm-Bamm 20							
22. 7.4d	Which students earned a score above 85%?							
	A Fred, Wilma, Barney							
	B Wilma, Barney C Barney Bamm-Bamm							
	D Fred, Wilma, Betty							
23.	A watch cost \$75.99. If the sales tax rate is 6.25%, what is the amount of sales tax?							
7.4d	A \$0.48 B \$2.19 C \$4.75 D \$474.94							
	If the price of gold went from \$460 an ounce to \$483 an ounce in one week, what was the percent change in the price of gold?							
24. 7.4d								
	A 4.8% increase C 5% increase							
	Find the percent of change when 40 is increased to 83. If necessary, round your							
25.	answer to the nearest tenth.							
7.4d	A 107.5% increase C 51.8% decrease							
	B 107.5% decrease D 51.8% increase							
	It is estimated that 20.4% of the US population in the year 2050 will be over the age							
26	of 65. Which number is NOT equivalent to 20.4%?							
20. 7.4d	204 <u>204</u>							
	$A \frac{1000}{100} \qquad C \frac{100}{100}$							
	B 0.204 D 2.04							
	A generator can run for 11 hours on 3 gallons of gasoline. If gasoline costs \$3 per							
27. 7.4d	gallon, which is closest to the cost per hour to run the generator?							
7. 4 u	A \$9.00 B \$33.00 C \$0.82 D \$1.22							
-	Bradley answered 80% of the questions on his science test correctly. There were 30							
29. 7.4d	questions on the test, and all of the questions had equal value. How many questions							
	ulu brauley no r allswer correctly off fils test?							
	Yash worked out at a gym for 2 hours. His workout consisted of stretching for 21							
30.	minutes, jogging for 45 minutes, and lifting weights for the remaining amount of time. What percentage of Yash's workout was spent lifting weights?							
7.4d	and. That percentage of Fash's workout was spent fitting weights:							
	A 55% B 45% C 66% D 54%							

31. 7.4d	Mr. Nelsor rate, how n days?	n sold 147 bags nany more bott	s of popcorn an tles of water that	d 216 bottle an bags of p	es of water opcorn wi	in 3 days ll Mr. Ne	s. At this lson sell in 5	
	А	84 E	3 69	C 115	D	Not here		
32. 7.4d	Every 2 da observing s observing d	ys a scientist s sea lions. At th dolphins and se	pends 1.25 hou nis rate, how m ea lions in 6 day	rs observing any total ho ys?	g dolphins urs will th	and 3.5 h e scientis	ours t spend	
	A	28. 5 h	B 14.25 h	С	9.5 h	D 2	23.5 h	
33. 7.4d	Xavier plan has run 1,6 completed?	ns to run 14 lar 80 yards arour ?	os around the tr nd the track. W	ack. Each l hat percenta	ap is 400 gage of the	yards. Sc run has X) far Xavier Kavier	
	А	7%	B 30%	C 70%	D	3%		
34. 7.4d	Marcella b oil in two y	ought a 25-our weeks. Which	nce bottle of oli of the followin	ve oil for \$5 g is closest	5.88. She to the cost	used 60% of the oi	of the olive l she used?	
	А	\$0.24	B \$0.39	C \$	2.35	D \$	3.53	
	Jessica ska skating?	ted 4 laps in 82	2 seconds. What	ich of the fo	ollowing in	an equiv	alent rate of	
35. 7.4d	Situring.					_		
///u	A6 laps in 120 secondsC10 laps in 205 secondsB6 laps in 130 secondsD10 laps in 215 seconds							
	Which equ the table?	ation represent	ts the relationsh	nip between	the <i>x</i> -valu	es and the	e y-values in	
]	x	v]			
2015			0	4	-			
2015 STA			2	16	-			
AR			6	40	-			
7.7.a			10	64]			
	А	y = 2x + 12	С	y = 2x + 4				
	В	y = 4x + 6	D	y = 6x + 4				

	Which table represents the linear relationship $y = 5x + 6$?	
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
36. 7.7a	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
	B D D D D D D D D D D D D D D D D D D D	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
37.	Mrs. Jacobs is a photographer. For each job she charges \$135 for the first hour she works and \$100 for each additional hour. Which linear equation below could be used to represent t , the total of Mrs. Jacobs' earnings?	
7.7a	A $t = 135h + 100$ C $t = 100h + 135$	
	B $t = (135+100)h$ D $t = 100h+235$	
	An electrician charges customers based on the table below.	
	Charge (\$) 75 135 195 255 315 Time (hr) 0 1 2 3 4	
38. 7.7a	Which of the following linear equations represents this relationship?	
	A $y = 75x$ C $y = 75x + 60$	
	B $y = 75x + 315$ D $y = 60x + 75$	
	Which relationship is best represented by the graph below?	
	100	
	80	
39.	60	
7.7a	20	
	0	
	0 0.2 0.4 0.6 0.8 1 1.2	
	A The number of seconds, x, in y hours B The number of hours x in y seconds	
	C The number of fluid ounces D The number of fluid ounces	
	Σ The number of fluid bullets, λ , in y ganolis	



	John is having a new deck built. He paid \$485 for the required materials, and he will pay his brother \$25 an hour to build the deck. Which table shows the relationship between h , the number of hours John's brother works, and c , the total cost of the project?						
	h	С		h	С		
	0	485		0	485		
40	3	510		3	560		
42. 7.7e	8	535		8	685		
/ . /a	12	560		12	785		
	В		D				
	h	С		h	С		
	0	510		0	510		
	3	535		3	585		
	8	560		8	710		
	12	585		12	810		



	Tyson and his friends go ice-skating. Tyson must pay an initial fee of \$18.30 plus \$4.80 per hour. Write an equation for the cost c Tyson must pay after skating for h	
46. 7.10a	answer as an ordered pair.	
/110 u	A $c = 18.30 + 4.80h$; (4, 37.50) B $c = 18.30 + 4.80h$; (4, 27.10) C $c = 4.80 + 18.30h$; (4, 78.00) D $c = 18.30 + \frac{4.80}{h}$; (4, 19.50)	
	Which number line represents the solution to the inequality $-7x - 13 \ge 8$?	
	A $-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5$	
2015 STA AR	B $-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5$	
7.10b	C $-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5$	
	D $-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5$	
	Write an inequality that represents the graph below if the endpoint is moved 5 units to the left.	
47.	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	
7.100	$\begin{array}{l} A x > 5 \\ B x > 7 \\ C x > 17 \end{array}$	
	$D_x > 12$	
	Which of the following graphs describes the solution set of $-\frac{4}{5}x - \frac{13}{5} \ge -9$?	
	$A \xleftarrow[-12 -8 -4 \ 0 \ 4 \ 8 \ 12]$	
48. 7.10b	$ \overset{B}{\longleftarrow} \xrightarrow{-12 - 8 - 4 \ 0 \ 4 \ 8 \ 12} $	
	$ \begin{array}{c} C \\ \leftarrow + + + + + + + + + + + + + + + + + +$	
	$D \xleftarrow{-12 - 8 - 4 \ 0 \ 4 \ 8 \ 12}$	

	Which problem situation matches the equation below?				
	15x = 120				
49. 7.10c	 A Chang collected 120 foreign postage stamps last year. He gave 15% of them to friends. What is <i>x</i>, the number of stamps Chang did not give away? B Cece exercised 120 minutes each day for 15 days last month. What is <i>x</i>, the total number of hours Cece exercised last month? C Demetria drove a total of 120 miles this week. She drove 15 miles more this week than she drove last week. What is <i>x</i>, the number of miles Demetria drove last week? D Adam charges \$15 per hour for labor to repair lawn mowers. What is <i>x</i>, the number of hours Adam worked if he charged \$120 for labor? 				
	Which situation is best represented by the equation below?				
50. 7.10c	7 = 127 - 5b A Of the 127 people attending the rugby game, 5 were at the concession stand, <i>b</i> were seated, and 7 were standing up and cheering. What is <i>b</i> , the number of attendees who were seated? B There were 7 players left over after 127 rugby players in a league were divided				
	 Into 5 teams with b players on each team. What is b, the number of players on each team? C There were 5 players left over after 127 rugby players in a league were divided into 7 teams with b players on each team. What is b, the number of players of each team? D Of b people attending a rugby game, there were 7 people at the concession stand, 127 people who were seated, and 5 people who were standing up and cheering. What is b, the number of people attending the game? 				
	Write a situation for the relationship $y-2x-5$. A Filo earns \$2 per hour but then buys lunch for \$5. How much money does he				
51. 7.10c	 nave left? B At the mall, Pena buys 2 CDs and spends \$5 on lunch. How much money does she have left? C Filo's allowance is twice Rachel's allowance less than \$5. What is Filo's allowance? 				
	D Marcus works out at the gym for half as many minutes as he spends eating lunch minus 5 minutes. How long does Marcus work out at the gym?				



	What is a correct method of solving the equation $\frac{x}{3} - 6 = 9$ for x?				
	A First subtract 6 from both sides of the equation, and then divide both sides of the equation by 3				
56. 7 11a	B First add 6 to both sides of the equation, and then divide both sides of the				
7.11a	C First subtract 6 from both sides of the equation, and then multiply both sides of the equation has 2				
	 D First add 6 to both sides of the equation, and then multiply both sides of the equation by 3. 				
	Larry has \$389.00. A DVD player costs \$97.00, and he can purchase used movies for \$11.55 each. What is the greatest number of movies Larry can buy if he also				
57.	buys a DVD player?				
7.11a	A at most 26C at most 25B at most 34D at most 43				
	Which equation is true when the value of x is -12 ?				
2015 STA AR	A $\frac{1}{2}x + 22 = 20$ C $11 - 2x = 17$				
7.11b	B $15 - \frac{1}{2}x = 21$ D $3x - 19 = -17$				
58.	Which is a solution for the equation $3n + 13 = 73$?				
7.11b	A $n = 20$ B $n = 56$ C $n = 12$ D $n = 36$				
59.	Which number is a solution of $7n+9 = -5$?				
7.11.b	A 2 B 3 C -2 D -3				

Category 3: Number of Questions:	Geometry and Measurement 12
Readiness Standards: (Will be on STAAR)	7.5c (Problems with similar shape and scale drawings)7.9a (Solve for volume of prisms and pyramids)7.9b (Determine circumference and area of circles)7.9c (Determine the area of composite shapes)
Supporting Standards: (Might be on STAAR)	 7.4e (Convert between measurement systems) 7.5a (Attributes of similarity, including ratios of similar shapes) 7.5b (Describe π as the ratio of the circumference to the diameter) 7.9d (Lateral/total surface area of pyramid or prism's net) 7.11c (Geometry equations such as sum of angles and angle relationships)

2015 STA	Teri ran 8 kilometers. One mile is approxiamtely equal to 1.6 kilometers. Which measurement is closest to the number of miles Teri ran?						
АК 7.4е	А	5 mi B 12.8 mi		С	6.4 mi	D 9.6 mi	
	Abdul is 5 centimeters	feet tall. Which equations, if 1 inch is equal to 2.5	on can 54 cer	be used ntimeter	l to determir s?	he h , Abdul's height in	
1. 7.4e	А	h = 2.54(5)	С	h = 2.5	54(5)(12)		
	В	$h = \frac{1}{2.54}(5)(12)$	D	$h = \frac{1}{2}$	$\frac{1}{54}(5)$		
2	Heather's c	desk is 3 feet long. Abou	it how	long is	it in meters	? 1 foot ≈ 0.305 meters	
2. 7.4e	А	0.00915 meters		C	0.915 met	ers	
	В	0.9015 meters		D	9.15 meter	`S	
3.	Joan mails package? 1	a package that weighs 1 l ounce ≈ 28.4 grams	40 gr	ams. At	oout how ma	ny ounces is the	
7.4e	A	0.2 ounces		C	168.4 oun	ces	
	A printing	company makes plastic	banne	ers 15 fe	et long by 6	feet wide. An overseas	
	customer w	vants to know about how	/ man	y square	e meters the	banner is.	
4	1 foot ≈ 0.3	305 meters					
 7.4e	А	8.37 square meters					
	В	27.5 square meters					
	C	90.0 square meters					
	D	900 square meters					

5.	Similar shapes: Corresponding angles are congruent, Corresponding sides are proportional	
7.5a	Congruent shapes: Corresponding angles are congruent, Corresponding sides are congruent	
	Janelle drew \overline{KL} in isosceles trapezoid FGHJ to create similar trapezoids FKLJ and KGHL.	
6. 7.5a	GK = 5 cm $GK = 5 cm$	
	Based on the given information, what are the values of y and w in centimeters? A $y = 11$ cm and $w = 15$ cm B $y = 15$ cm and $w = 15$ cm C $y = 11$ cm and $w = 27$ cm D $y = 15$ cm and $w = 27$ cm	
7. 7.5a	If the corresponding angles of 2 polygons are congruent and the lengths of the corresponding sides of the polygons are proportional, the polygons are – A rectangular C congruent	
	b Symmetric b Similar Which of these best describes π^2	
2015	which of these dest describes \mathcal{X} ?	
STA	A The square root of the area of a circle.	
AR	B The ratio of the radius of the circle to its diameter.	
7.5b	C The radius of a circle times 3.14.	
	A circle has a circumference of 75.36 yards. What is its diameter? Use 3.14 for π	
	and round to the nearest yard.	
9. 7.5b	A 12 yards B 24 yards C 237 yards D 473 yards	
	Find the circumference of a circle that has a radius of 7 cm. Use 3.14 for π .	
10. 7.5b	A 21.98 cm C 114.74 cm B 43.96 cm D 153.86 cm	

















	Find the values of x and y.	
34. 7.11c	A $x = 55; y = 115$ B $x = 65; y = 135$ C $x = 45; y = 135$ D $x = 55; y = 125$	
35. 7.11c	In the figure below, $\angle BFC$ and $\angle CFD$ are complementary angles. If $m\angle AFB$ is 6° less than $m\angle DFE$, what is $m\angle AFB$? A 93° B 87° C 48° D 42°	
36. 7.11c	The length of a rectangle is 99 centimeters. Find all possible values for the width of the rectangle if the perimeter is at least 240 centimeters.	
	A $w \le 21 \text{ cm}$ B $w \le 141 \text{ cm}$ C $w \ge 21 \text{ cm}$ D $w \ge 141 \text{ cm}$	

Category 1: Number of Questions:	Probability and Numerical Relationships 6
Readiness Standards:	7.6h (Making predictions and comparisons from simple experiments)
(Will be on STAAR)	7.6i (Experimental/theoretical probabilities of simple/compound events)
Supporting Standards:	7.2a (Describe relationships between sets of rational numbers)
(Might be on STAAR)	7.6a (Use lists/tree diagrams to represent sample spaces of events)
	7.6c (Make predictions/determine solutions using experimental data)
	7.6d (Make predictions/determine solutions using theoretical probability)
	7.6e (Find the probabilities of a simple event and its complement)





5.	Kia's experimental bat, about how man	probability of striki y times will she str	ing out at baseball is 13 ike out?	%. Out of 30 times at	
7.60	A 4	B 9	C 12	D 18	
6. 7.6c	Based on a sample survey, a company claims that 75% of their customers are satisfied with their products. Out of 1,176 customers, how many would you predict to be satisfied?				
	A 732	B 682	C 782	D 882	
7.	If you roll a number	cube 72 times, how	w many times do you ex	xpect to roll a 6?	
7.6d	A 9 times	B 12 times	C 11 times	D 10 times	
8. 7.6d	Ashley predicts that wants to have at lea	292% of the people st 23 guests, how n	she invites to her party nany people should she	will come. If she invite to her party?	
	A 134 people	B 21 people	C 25 people	D 250 people	
	The table shows the	types of movies ar	nd the numbers of DVD	os rented by customers	
	at a store in one day	Type of Mov	ie Number of Rental	ls	
		Drama	25		
		Comedy	36		
		Family	52		
		SC1-F1	12		
2015	Based on the data ir	the table, what is t	the probability that a rat	ndom customer will	
STA	not rent a drama?				
АК 7.6.е	1		3		
	A $\frac{1}{4}$, because the	probability of renting	ng a drama is $\frac{5}{4}$.		
		1 1 11 6	, . 1		
	$\begin{bmatrix} B & -, because the \\ 4 \end{bmatrix}$	probability of rentil	$\frac{1}{4}$ hg a drama is $\frac{1}{4}$.		
	$C = \frac{4}{2}$, because the	probability of renti	ng a drama is $\frac{1}{-}$.		
	5		5		
	D $\frac{1}{5}$, because the j	probability of rentin	ng a drama is $\frac{4}{5}$.		
	At the Rockville Mi	ddle School carniv	al, 4 of the first 160 peo	ople who played the	
9.	ring toss game won prize. What is the exprise?	the first prize, 8 wo sperimental probab	on the second prize, and ility of not winning the	d 12 won the third first, second, or third	
7.6e					
	A 0.24	B 0.15	C 0.86	D 0.85	

	A bag contains blue, green, yellow, and red marbles. The probability of drawing a						
	vellow marble is $\frac{3}{2}$ What is the probability of NOT drawing a vellow marble?						
10.	20°						
7.6e	_						
	$A \frac{7}{-} B$	3	С	17	D $\frac{3}{2}$	_	
	10	20	_	20	80)	
	There are 6 crayons in a	box. Only one of	them i	s gold. A cr	ayon is select	ed at	
11.	random. Find the probab	oility that it is not	gold.				
7.6e	5	2		1	1		
	A $\frac{5}{6}$ B	$\frac{2}{3}$	С	$\frac{1}{6}$	D $\frac{1}{2}$		
	U Deborah surveyed custo	$\frac{J}{mars in a restaura$	nt to fi	nd out their	favorite meal	The	
	results are shown in the	table.		nu out then		. 1110	
		Meal		Number of	People		
	Hamb	ourger and french	fries	17			
		Spaghetti		8			
2015	X	Chili Vacatorian dalight		12			
STA		egetarian delignt		3			
AR	One person in the restau	rant will be picked	d at rai	ndom. Base	d on the give	n	
7.6.h	information, which state	ment is true?			0		
					10 10		
	A The person's favorite meal is twice as likely to be hamburger and french fries as it is to						
	B The person's favorite n	neal is four times as	likely	to be chili as	s it is to be vege	etarian	
	delight.C The person's favorite meal is more likely to be chili than hamburger and french fries.D The person's favorite meal is likely to be either vegetarian delight or spaghetti.						
	John tossed a paper cup	30 times and reco	rded h	ow the cup	landed each ti	ime. He	
	organized the results in t	he table shown. B	ased o	on John's res	sults, is the cu	ip more	
	likely to land right-side	up or on its side?					
	0	Dialet aida un	Line	ida darra	On its sid		
12.	Frequency	Right-side up	Ups	side down		e	
7.6h	riequency	1		0	15		
	A It is more likely the	cup will land on it	ts side				
	B It is as likely the cup	will land right-si	de up	as on its sid	e.		
	C It is more likely the	cup will land righ	t-side	up.			
	D It is impossible to de	etermine which is	more	likely.	aguita ara al-		
	Predict the number of tit	nes the number of	ber cut	be, and the r	esuns are sno	wn. r in 400	
	rolls.	nes die number et	~~~ vv1			100	
13.	Outcome	1 2	3	4 5	6		
/.on	Frequency	y 24 10	8	3 30) 15		
		-	~	• •			
	A 44	B 80	C 1	24	D 276		

	Bruce to	ok a survey of high scl	nool students to see how	w many had part-time	jobs last	
summer. The results of the survey are shown in the table. Compare the probability						
	that a stu	ident in the senior clas	s had a part-time job to	the probability that a	student	
	in the ju	nior class had a part-tin	ne job.		_	
		Grade Level	Students Who Had	Students		
			a Summer Job	Students		
14		Freshman	23	70		
7.6h		Sophomore	10	63		
/.011		Junior	20	35		
		Senior	22	54		
	A A se	nior is more likely that	n a junior to have a job			
	B A se	nior is less likely than	a junior to have a job.			
	C A se	nior is just as likely as	a junior to have a job.			
	D It is	impossible to determine	ne which one is more li	kely.		
	Mildred	has a bag of coins. Th	e bag contains 10 dime	es, 5 nickels, and 1 per	nny. She	
2015	will rand	lomly select 2 coins fro	om the bag one at a tim	e without replacement	t. What	
STA	is the pro	obability that Mildred	will select a dime first	and then a penny?		
AR	1	2		1 2		
7.6.i	83	р 11	5	р 1		
	A $\overline{120}$	В —	$C = \frac{128}{128}$	$D = \frac{1}{24}$		
	Hammaan	d Hammiana ana mlavin	a a sama with 2 avera	an amh an TIonne anta a	naint	
	Harry an	a Hermione are playin	er and Hermione gets a	point when the sum i	s greater	
	than 7		er alle Hermione gets a	point when the sum i	s greater	
	ulali 7.	S	um of two number cub	26		
				6		
		1	2 3 4 5 6	7		
		$\frac{1}{2}$	3 4 5 6 7	8		
		3	$\frac{1}{1}$ $\frac{5}{6}$ $\frac{0}{7}$ $\frac{7}{8}$	9		
			5 6 7 8 9	10		
15.		5 (5 7 8 9 10	10		
7 .6 i		6	7 8 9 10 11	12		
		0		12		
	Who is r	nost likely to get a poi	nt on the first roll?			
		18 21		18 15		
	A Harr	y because $\frac{10}{36} < \frac{21}{36}$	C Harry	y because $\frac{10}{36} > \frac{10}{36}$		
		50 50		50 50		
			18 18	21 18		
	B They	are equally likely becau	$138 = \frac{10}{36} = \frac{10}{36}$ D Herm	nione because $\frac{21}{26} > \frac{10}{26}$		
			30 30	30 30		

	Fazio is selecting a jersey. His choices are shown below.	
16. 7.6i	Fazio chooses a jersey at random and then replaces it. He then selects a second jersey at random. What is the probability that Fazio selects a striped jersey both	
	times? A $\frac{1}{100}$ B $\frac{1}{16}$ C $\frac{1}{25}$ D $\frac{1}{81}$ A b b b c i c i c i c b b b b b b b b b b	
17. 7.6i	 A desk drawer contains the different colored markers listed below. 3 green markers 5 blue markers 10 red markers 10 red markers A marker will be randomly selected from the drawer and then replaced. Then another marker will be randomly selected from the drawer. What is the probability that a green marker will be selected both times? 	
	A $\frac{1}{36}$ B $\frac{1}{6}$ C $\frac{1}{51}$ D $\frac{1}{54}$	
18. 7.6i	A bag of fruit contains 3 apples, 2 oranges, 1 banana, and 4 pears. Gerald will randomly select two pieces of fruit one at a time from the bag nd not put them back. What is the probability that the first piece of fruit Gerald selects will be a banana and the second piece of fruit will be a pear?	
	A $\frac{1}{25}$ B $\frac{2}{45}$ C $\frac{1}{2}$ D $\frac{4}{9}$	
19. 7.6i	The spinner below has 12 congruent sections. Sarah will spin the arrow on the spinner twice. What is the probability that the arrow will land on a section labelled M on the spinner on both spins? A $\frac{25}{144}$ C $\frac{5}{33}$ B $\frac{1}{9}$ D $\frac{25}{49}$ M M	

Category 4: Number of Questions:	Data Analysis and Personal Financial Literacy 6
Readiness Standards: (Will be on STAAR)	7.6g (Solve problems with bar graphs, dot plots, and circle graphs)7.12a (Compare data in dot plots/box plots with shape/center/spread)
Supporting Standards: (Might be on STAAR)	 7.12b (Use data from a random sample to make inferences about a pop.) 7.12c (Compare populations based on data in a random sample) 7.13a (Calculate sales and income tax) 7.13b (Components of a budget, fixed/variable expenses, calculate %s) 7.13c (Create asset and liability record and construct a net worth statement) 7.13d (Determine budget and wage to meet a family's needs) 7.13e (Calculate and compare simple interest and compound interest) 7.13f (Compare monetary incentives like sales, rebates, and coupons)









	The number of students in each of 2 exercise classes was the same. The box plots				
	below represent the average amount of time the students in each class spent				
	exercising daily outside class.				
	First Class				
	Second Class				
	■ ■ ■ ■ ■ ■ ■ ■ ■ ■				
6. 7.12a	Based on the information in the box plots, which statement about the time spent				
	exercising outside of class appears to be true?				
	A The median amount of time the first class spent exercising was greater than the median amount of time the second class amount exercising				
	B The range for the second class was less than the range for the first class				
	C The interquartile range for the first class was less than the interquartile range				
	for the second class				
	D The minimum amount of time the second class spent exercising was greater				
	than the minimum amount of time the first class spent exercising.				
	The lives of two different brands of 60-watt light bulbs are shown in the box-and-				
	whisker plots. Compare the medians and the ranges of the data sets.				
7.					
7.12a					
	A Glo-Brite has a greater median. Glo-Brite has a greater range.				
	B The medians are equal. Luminate has a greater range.				
	C The medians are equal. Glo-Brite has a greater range.				
	D Glo-Brite has a greater median. Luminate has a greater range.				



	As part of a survey.	50 students were aske	ed about the	eir favorite	lunch iten	n. The								
	results are shown in the table below.													
		Favorite Item	Number	of Students	5									
		Pizza		10										
		Tacos		5										
		Hot dogs		15										
		Hamburgers	/	20										
11. 7.12b	The cafeteria manager knows that about 300 students buy lunch from the cafeteria each day. Based on the table, she predicts that 60 students will buy pizza each day. Which statement about her prediction is true? A Her prediction is invalid because $\frac{1}{5}$ of 50 is 10. B Her prediction is invalid because $\frac{1}{4}$ of 300 is 75. C Her prediction is valid because 120% of 50 is 60.													
12. 7.12c	DHer predication is valis because 20% of 300 is 60.Three machines at a cheese factory cut the blocks of cheese before they are wrapped. The weights of the cheeses are checked afterwards. The table below shows the weights, in ounces, of the cheese blocks from the three machines.Which of the following is best supported by the data in the table?AMachine B wastes the most cheese.BMachine A is the most consistent. CCMachine C is the fastest. DDMachine C is the least consistent.C333332333433353636333733 <td< th=""></td<>													

	A teacher is comparing the quarter grades between two of her classes. She takes a												
	random sample of 8 students from each class and lists the grades as shown. Which												
	statement best describes the comparison between the two data sets?												
	I												
	Class A: 80, 83, 74, 91, 76, 87, 93, 72												
	Class B: 90, 75, 82, 86, 73, 85, 79, 94												
	Class D. 20, 73, 02, 00, 73, 03, 77, 74												
	A The sample mean for class A is greater than the sample mean for class B, but												
1.0	since the distributions of the grades have considerable overlap, it is not												
13.	unlikely that the mean grades for classes A and B are the same												
7.12c	B The sample mean for class A is greater than the sample mean for class P and												
	since the distributions of the grades have little overlap, it is unlikely that the												
	mean grades for closes A and P are the same												
	C. The second second for sheet A is less than the second second for sheet D but since												
	C The sample mean for class A is less than the sample mean for class B, but since												
	the distributions of the grades have considerable overlap, it is not unlikely that												
	the mean grades for classes A and B are the same.												
	D The sample mean for class A is less than the sample mean for class B, and												
	since the distributions of the grades have little overlap, it is unlikely that the												
	mean grades for classes A and B are the same.												
2015	Cassie wants to buy a pair of shoes for \$26.50 and a shirt for \$9.50. If the sales tax												
STA	is 8.25%, what will be the amount of sales tax on Cassie's purchases?												
AR													
7.13a	A \$2.89 B \$2.97 C \$3.06 D \$3.13												
	Sara wants to buy a necklace. The necklace has a list price of \$41, and the sales tax												
	is 6%. What will be the cost of the necklace after tax is added? Round your answer												
14.	to the nearest cent.												
7.13a													
	A \$43.46 C \$2.46												
	B \$38.54 D \$54.06												
	Juan's purchase before sales tax was added totaled \$46.00. The total including tax												
	was \$48.76 What was the sales tax rate?												
15.													
7.13a	A 276% C 60%												
	$\begin{array}{c} R & 2.70\% \\ R & 5.7\% \\ \end{array} \qquad \qquad D & 8.0\% \\ \end{array}$												
	Regi makes \$12,000 a year and he pays 15% of his income in income tax. How												
16	much money does Regi have after he has paid his income taxes?												
7 139													
/ •1.5 u	A \$1,800 C \$10,200												
	B \$13,800 D \$12,015												
1													

	Maria's mo Maria's mo	onthly inco onthly bud	ome is \$2,0 get and the	000. The t e amount c	able displa of money s	iys the diff he spends	Ferent categ	ories in egory.							
	Category	Rent	Utilities	Cable	Cell phone	Savings	Groceries	Other expenses							
2015	Amount of money	\$900	\$120	\$80	\$100	\$300	\$320	\$180							
STA AR 7.13b	 Which statement is not supported by the information in the table? A More than ¹/₂ of Maria's monthly income is spent in rent. B Maria puts 15% of her monthly income into savings. C More than ¹/₄ of Maria's monthly income is spent on utilities, cable, and 														
	D Maria spends 14% of her monthly income on her cell phone and other expenses.														
17	What is an example of a variable expense?														
7.13b	ACar paymentCClothingBEmergency savingsDWasher rental fee														
	The table r \$3,900. Ho	epresents w much d	the Martin oes the Ma	family's b artin famil	oudget. The y put in sa	eir net mor vings in a	nthly incom year?	ne is							
	Catagony														
			Em	ergency Fi	$\frac{10}{100}$	cent	-								
			Sav	ings	10%	6									
10			Hou	ising	25%	6									
19. 7 12b			Foo	d	15%	б									
7.150			Clo	thing	8%										
			Ent	ertainment	15%	6									
			Tra	nsportation	n 12%	6									
			Mee	lical costs	11%	6									
	A	¢100		C	¢2 020										
	A B	\$390		L D	\$4.680										

	The table shows Gi liabilities are shown	illian's net worth. Assets are s n as negative numbers.	hown as posit	tive numbers, and										
		Net Worth												
	Г	Item	Value											
	H	House (current value)	\$87,900											
	(Checking account	\$950											
2015 STA	(Credit-card debt	-\$2,650											
AR	/	Automobile (current value)	\$10,300											
7.13c	9	Student loans												
	1	Investments	\$5,000											
	F	Personal loans	-\$1,200											
	5	Savings account	\$2,450											
	Gillian's net worth is \$90,500. Based on the information in the table, what is the amount of money Gillian owes for student loans?													
	A \$19,950 B \$12,250 C \$16,100 D \$86,650													
20. 7.13c	 What is net worth? A The things you own that have a positive value. B The difference between your assets and liabilities. C The debts you owe. D The amount of money you corr 													
	Monty's made a lis	t of his assets and liabilities.	How many lia	bilities are on the list?										
		Rent												
		Car, paid for												
21.		Money in a checkin	g account											
7.13c		Television, paid for												
		Sailboat, making pa	yments											
		• Computer, paid for												
	A 1	B 2 C 3	D 4											

	Frankie keeps track	of his net worth by maki	ng a table each	month. In January, he								
	had 8 months left on his lease. He finished making car payments in 2009. Which of											
	the following statements is true about Frankie's net worth in January 2013?											
	Fran	kie's assests and liabilit	ties - January 2	2013								
	Mont	thly rent and utilities	\$675.75									
	Valu	e of car	\$2,850.00									
22.	Balar	ice of savings account	\$1,822.23									
7.13c	Cred	it card balance	\$643.12									
	Valu	e of furniture	\$995.00									
	A Frankia had a positive not worth											
	B Frankie has mo	re assets than liabilities										
	C If Frankie's cre	dit card balance were \$40	00 less, he woul	ld have a positive net								
	worth.											
	D If Frankie's car were valued at \$3,000, he would have a positive net worth.											
	· · · · · · · · · · · · · · · · · · ·											
	A monthly budget with expenses is shown.											
		MONTHLY BU	JDGET									
		in San Antonio	Texas									
			, 10,03									
		合 Rent	\$870									
		🗇 Food	\$550									
		ရ <mark>ြှ Child car</mark> e	\$375									
2015		Transportation	\$480									
STA		😵 Utilities	\$400									
AR		Insurance	\$235									
7.13d		(₤> Savings	\$400									
		Taxes	\$290									
		Monthly total										
				1								
	Which equation can	be used to determine v.	the minimum a	mount of money a								
	family must earn to	meet the requirements of	f this budget for	r one year?								
		1	C	-								
	A y = 3600)×12	C $y = 3600 \times$	4								
	B $y = 3600$)÷7	D $y = 3600 \div$	52								

	Sue Nowak and her two chil	dren are moving from El Pas	so to Laredo. Sue Nowak									
	will earn \$2,200 more per year at her new job in Laredo. Based on the chart that											
	Sue made using an online cost of living tool, what is the annual difference between											
	the increase in her wages and the increase in cost of living?											
	Monthly Expenses	El Paso, TX	Laredo, TX									
	Housing	\$567	\$623									
23.	Food	\$465	\$465									
7.13d	Child Care	\$827	\$827									
	Health Care	\$350	\$350									
	Transportation	\$339	\$343									
	Other Necessities	\$248	\$261									
	Taxes	\$-38	\$30									
		· · · · · ·										
	A \$1,692 B	\$1,744 C \$508	D \$2,059									
	Mr. Juarez opened a savings	account with an initial depo	osit of \$560 and will not									
2015	make any additional deposits	s or withdrawals. The accou	int earns 1% simple									
STA	interest. What is the total an	nount that Mr. Juarez will ha	ave in his account at the end									
AR	of 3 years?											
7.13e	A \$168.00 B \$56.00 C \$565.60 D \$576.80											
	Nicola deposited \$2,000 at 60% simple interest. How long will it he hefere she had											
24	\$ 1 Nicole deposited $$$ 2,000 at $0%$ simple interest. How long will it be before she has $$$ 2,600 in her account?											
 7.13₀												
7.150	A 4 yr B	5 yr C 6 yr	D 7 yr									
	Determine the compound int	terest earned in the following	situation. Kiera places									
	\$1,000 in a savings account	for 2 years earning 4% com	bounded interest annually.									
25. 7.12-	How much interest will she l	had at the end of two years?										
7.13e		-										
	A \$80 B \$1	1,081.60 C \$1,080	D \$81.60									
	A car dealership offers two t	types of discounts.										
	• Discount 1: Take 5%	% off the original price of a c	ar built last year and then									
	receive a \$3,500 reba	ate										
	• Discount 2: Take 10	% off the original price of a	car this year and then									
	receive a \$1,250 reba	ate										
2015	Δ customer is deciding betw	veen two cars										
2013 STA	• Cor P was built last x	war and has an original prior	a of \$25.340									
	• Car S was built this y	year and has an original price	$z = 01 \ 323,340.$									
7.13f	• Cal 5 was built this y	year and has an original price	= 01 \$22,800.									
	Based on this information, w	whch statement is true?										
	A The customer wou	uld nav \$19 324 for Car S										
	B The customer wor	11d pay \$24,073 for Car R										
	C The customer wor	ald pay \$21,824 for Car S.										
	D The customer wou	uld pay \$23,107 for Car R.										
24. 7.13e 25. 7.13e 2015 STA AR 7.13f	A \$168.00 B \$56.00 C \$565.60 D \$576.80 Nicole deposited \$2,000 at 6% simple interest. How long will it be before she has \$2,600 in her account? A 4 yr B 5 yr C 6 yr D 7 yr Determine the compound interest earned in the following situation. Kiera places \$1,000 in a savings account for 2 years earning 4% compounded interest annually. How much interest will she had at the end of two years? A \$80 B \$1,081.60 C \$1,080 D \$81.60 A car dealership offers two types of discounts. Discount 1: Take 5% off the original price of a car built last year and then receive a \$3,500 rebate Discount 2: Take 10% off the original price of a car this year and then receive a \$1,250 rebate A customer is deciding between two cars. • Car R was built last year and has an original price of \$25,340. • Car S was built this year and has an original price of \$22,860. Based on this information, whch statement is true? A The customer would pay \$19,324 for Car S. B The customer would pay \$24,073 for Car S.											

 A smart phone is on sale for \$89.95 at Riverside Electronics. Gadgets and More has the same phone for \$124.00, and it is on sale for 35% off. Which store has the better deal, and how much less does the phone cost at that store? A Riverside Electronics; \$11.92 C Riverside Electronics; \$0.95 B Gadgets and More; \$9.35 D Gadgets and More; \$46.55 Matak wants to buy a 50-inch television. He made a table with the four best deals he has found for the television he wants to purchase. Use the table to find the 										
27	difference in cost bet Store A Regular price:	Store D Regular price:								
7.13f	\$449.95 Mail in rebate: \$25	\$685.00 Take \$15 off of every full \$75 spent	\$515.75 Coupon: \$75 off	\$772.50 Mail in rebate: \$85 off Coupon: \$215 off						
	A \$125.05 C \$185.05 B \$77.50 D \$109.25									
		Use formula char	rt for all formulas							
		Use formula chart v Read the que	with ruler on the sid	e						
		Read all fo	our answers							
	М	ake sure your bubbl	e matches your ans	wer						
	Ma If you hav	ke sure the answer	makes reasonable s	ense						
	n you nav	Draw a P	ICTURE!	are wrong						
	Tak	e your time – The fa	stest is not the sma	rtest.						
	The mos	st difficult questions	are in the middle o	f the test.						
	C Triang	omplementary = 90, les = 180 degrees, Q	Supplementary = 1 uadrilaterals = 360	80 degrees						
75% o	75% of the mistakes students make are not because of the math. This is a test of who can read the problems carefully and who can prove their answers are correct.									

														_	_	_						_
Θ	$\bigcirc \bigcirc $	$0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	$\bigcirc \bigcirc $	•	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0103456780	Ð	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\bigcirc \bigcirc $	0	$\bigcirc \bigcirc $	•	$\bigcirc \bigcirc $	0	⊕⊕	$\bigcirc \bigcirc $	0 1 0 3 4 5 6 7 8 9	0 0 0 0 0 0 0 0 0 0	0	•	0	0103450789
Φ	$\bigcirc \bigcirc $	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	•	0103460000000000000000000000000000000000		Ð	0103460000000000000000000000000000000000	$\bigcirc \bigcirc $	0	$\bigcirc \bigcirc $	•	$\bigcirc \bigcirc $	0	() ()	$\bigcirc \bigcirc $	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	•	0	
 ⊙	$\bigcirc \bigcirc $	0 (1) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	$\bigcirc \bigcirc $	•	0103456789		Ð	0103456789	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-	$\bigcirc \bigcirc $		Ð	$\bigcirc \bigcirc $	$\bigcirc \bigcirc $	0 (0) (0) (0) (0) (0) (0) (0) (0) (0) (0		-		