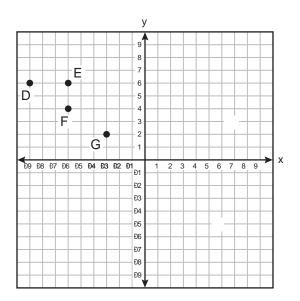
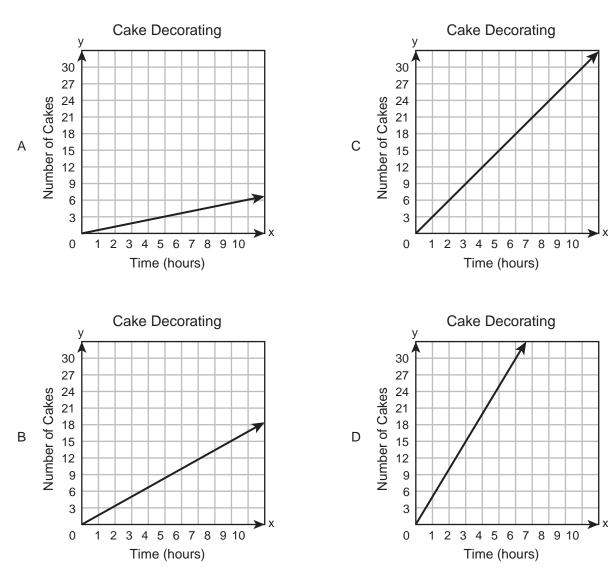


R

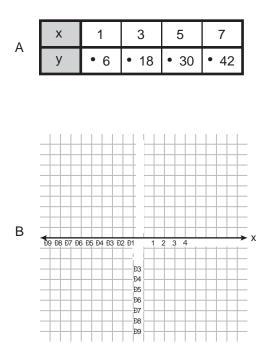
3 Triangle DEF and triangle GHI are similar right triangles.



4 Judy can decorate 3 cakes in 5 hours. Which graph has a slope that best represents the number of cakes per hour Judy can decorate?



6 Which representation does not show y as a function of x?

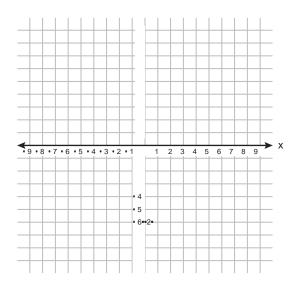


9 Which situation can be represented by this equation?

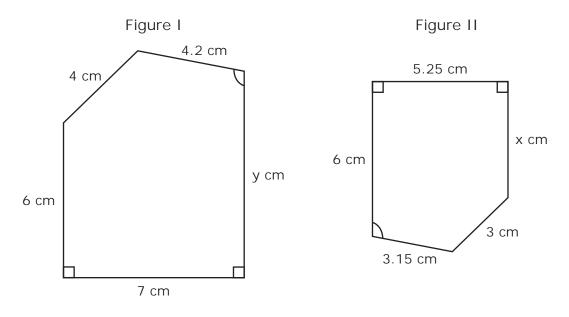
340 + 5x = 650 8x

А

11 The two lines graphed on the coordinate grid each represent an equation.



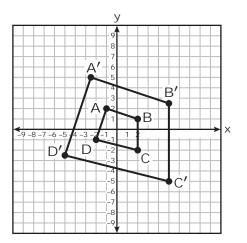
12 Figure I and Figure II are similar pentagons.



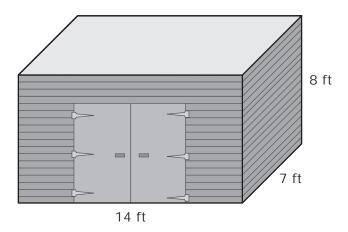
Which proportion must be true?

 $A \quad \frac{y}{x} = \frac{4.2}{3.15}$ $B \quad \frac{6}{x} = \frac{5.25}{7}$ $C \quad \frac{y}{6} = \frac{7}{5.25}$ $D \quad \frac{x}{4} = \frac{3}{6}$

13 Quadrilateral ABCD was dilated with the origin as the center of dilation to create quadrilateral ABCC Dr. c c



15 Mr. SuÆrez wants to paint his storage shed. He needs to calculate the lateral surface area of the shed so that he will know how much paint to buy. The shed is in the shape of a rectangular prism with the dimensions shown below.



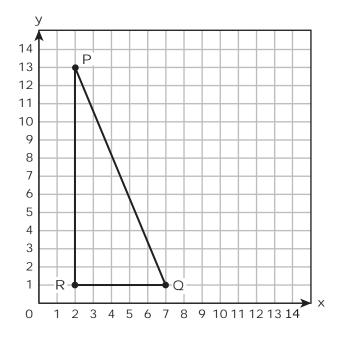
Including the doors, what is the lateral surface area of the storage shed in square feet?

- A 784 ft²
- B 266 ft^2
- $C \quad 532 \ ft^2$
- $\mathsf{D} \quad 336 \ \mathrm{ft}^2$

16 Which measurements could not represent the side lengths of a right triangle?

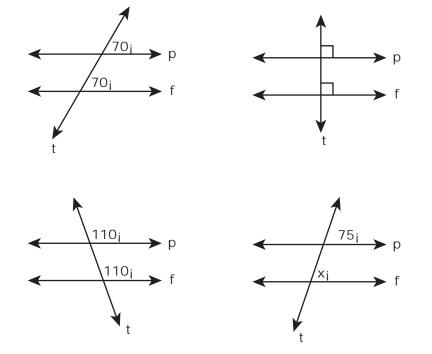
- A 6 cm, 8 cm, 10 cm
- B 12 cm, 35 cm, 37 cm
- C 4 cm, 6 cm, 10 cm
- D 10 cm, 24 cm, 26 cm

17 The coordinates of the vertices of the triangle shown are P (2, 13), Q (7, 1), and R (2, 1).



What is the length of segment PQ in units?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

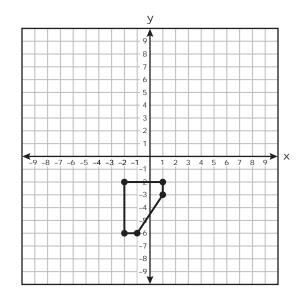


18 In each diagram, line p is parallel to line f, and line t intersects lines p and f.

Based on these diagrams, which statement is true?

- A The value of x should be 75, because the angles shown in the diagrams are congruent.
- B The value of x should be 105, because the measures of the angles shown in the diagrams add up to 180°.
- C The value of x should be 140, because the measures of the angles shown in the diagrams should add up to 360° and 360 (110 + 110) = 140.
- D The value of x should be 70, because the measures of the angles shown in the diagrams are both 70°.

21 A figure is graphed on a coordinate grid as shown.

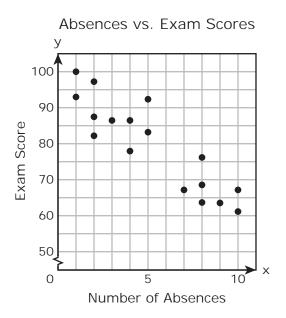


The figure is rotated 180° clockwise with the origin as the center of rotation to create a new figure. Which rule describes this transformation?

- A (x, y) o (x, y)
- B (x, y) o (x, y)
- C (x, y) o (y, x)
- D (x, y) o (x, y)

- У У С А × × 8 9 7 8 1 2 У У ¥ • • • В D ۲X ΙX 1 2 8 9
- 22 Which scatterplot suggests a linear relationship between x and y?

23 Mrs. Collins made a scatterplot to show the relationship between the number of absences a student in her class has and the student's final exam score.



Based on this scatterplot, approximately what score should a student with 6 absences expect to receive on the final exam?

- A 65
- B 92
- C 67
- D 76

24 The table shows the number of contacts six people each have stored in their cell phone.

Cell Phone	Contacts
------------	----------

Person	Number of Contacts	
Mary	68	
Wes	72	
Keith	77	
Julie	64	
Anthony	69	
Lan	76	

What is the mean absolute deviation for this set of data?

A 71

B 24

- C 4
- D 13

- 25 Holly is taking out a loan in the amount of \$10,000. Her choices for the loan are a 4-year loan at 4% simple interest and a 6-year loan at 5% simple interest. What is the difference in the amount of interest Holly would have to pay for each of these two loans?
 - A \$1,600
 - B \$3,000
 - C \$4,600
 - D \$1,400

STAAR Grade 8 Mathematics

l tem Number	Correct Answer	Reporting Category	Readiness or Supporting	Content Student Expectation	Process Student Expectation
1	В	1	Supporting	8.2(A)	8.1 (B),(E),(G)
2	С	1	Readiness	8.2(D)	8.1 (B),(E),(F)
3	D	2	Supporting	8.4(A)	8.1 (B),(C),(E),(G)
4	А	2	Readiness	8.4(B)	8.1 (A), (B), (C), (D), (F)
5	-5	2	Readiness	8.4(C)	8.1 (B),(E),(F)
6	D	2	Readiness	8.5(G)	8.1 (B),(E),(F)
7	С	2	Readiness	8.5(I)	8.1 (B),(C),(D),(F)
8	А	2	Supporting	8.8(A)	8.1 (A),(B),(D),(F)
9	А	2	Supporting	8.8(B)	8.1 (A),(B),(D),(G)
10	С	2	Readiness	8.8(C)	8.1 (B),(F)
11	В	2	Supporting	8.9(A)	8.1 (B),(E),(F)
12	С	3	Supporting	8.3(A)	8.1 (B),(E),(F)
13	С	3	Readiness	8.3(C)	8.1 (B),(D),(F)
14	С	3	Readiness	8.7(A)	8.1 (A), (B), (C), (E), (F)
15	D	3	Readiness	8.7(B)	8.1 (A), (B), (C), (E), (F)
16	С	3	Readiness	8.7(C)	8.1 (B),(C),(F)
17	13	3	Supporting	8.7(D)	8.1 (B),(C),(E),(F)
18	А	3	Supporting	8.8(D)	8.1 (B),(E),(G)
19	В	3	Supporting	8.10(A)	8.1 (B),(E),(G)
20	С	3	Supporting	8.10(B)	8.1 (B),(G)
21	А	3	Readiness	8.10(C)	8.1 (B),(D),(F)
22	С	4	Supporting	8.5(C)	8.1 (B),(E),(F)
23	D	4	Readiness	8.5(D)	8.1 (A),(B),(C),(E),(F)
24	С	4	Supporting	8.11(B)	8.1 (A),(B),(E),(F)
25	D	4	Supporting	8.12(A)	8.1 (A),(B),(C),(F)
26	D	4	Readiness	8.12(D)	8.1 (A),(B),(C),(G)
27	В	4	Supporting	8.12(G)	8.1 (A),(B),(G)
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