

1. A quarterback completed 18 of 24 passes. What percent of the passes did the quarterback complete?

2. The driving distance between Denver and Chicago along Interstate 80 is about 1020 miles. About how long would it take to drive that distance at 60 miles per hour?

3. How much money is a 20% down payment on a \$23,900 car?

4. The vertices of triangle ABC are $A(1, -2)$, $B(4, 0)$, and $C(3, 3)$. Find the coordinates of the vertices of its image, $\Delta A'B'C'$, reflected in the y-axis.

5. The team won 18 of its 30 games. What was the team's won-lost ratio?

6. Devon draws one marble from a bag containing 5 red, 3 green, and 4 yellow marbles. What is the probability that Devon draws a green marble?

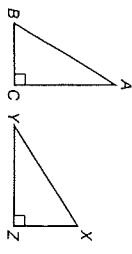
7. Find the volume of an aquarium that is 15 inches long, 8 inches wide, and 10 inches deep.

8. Glenda wants to paint the exterior lateral surface of her house. It is eight feet high and has a perimeter of 120 feet. Each gallon of exterior paint covers 300 square feet. How many one-gallon cans of paint does she need to buy to paint her house?

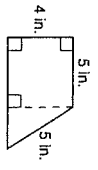
9. Malcomb can drive about 300 miles between 12-gallon fill-ups. At that rate, how many gallons of gas does his car use driving 125 miles?

10. Convert 7.5 gallons to quarts using a unit multiplier. Show your work.

11. The two triangles shown are congruent. Which angle in the triangle on the right corresponds to $\angle A$?



12. What is the area of this figure?



13. The hose was coiled into circular loops about 20 inches in diameter. To the nearest foot, each loop of hose was about how many feet long?

14. The area of the top of a 10-inch diameter plate is about

A. 30 in.²
 B. 60 in.²
 C. 80 in.²
 D. 100 in.²

For questions 15 and 16, solve for the unknown variable.

15. $\frac{8}{3} = \frac{7}{12}$

16. $3x - x - 1 = 15$

For questions 17–20, simplify the expression.

17. 7.5×10^6
 3×10^3

18. $(3 \times 10^{-9})(1.2 \times 10^{-4})$

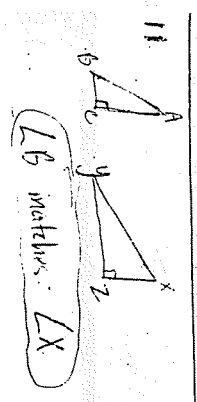
19. $\frac{(-3) - (-2) + (-1)}{(-1)(-2)}$

20. $3x + 3(x - 2) + 3$

Score: _____

1. $18 \div 24 = 0.75$
 $0.75 = \boxed{75\%}$

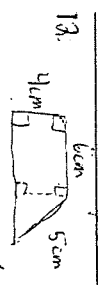
6. $\frac{5 \text{ red} + 3 \text{ green} + 4 \text{ yellow}}{12 \text{ total}}$ Probability (Green) = $\frac{3}{12}$
 $\frac{3}{12} \div 3 = \boxed{\frac{1}{4}}$



16. $5x - 1x - 1 = 25$
 $2x = 26$
 $26 \div 2 = \boxed{13}$

2. $1030 \div 60 = \boxed{17 \text{ hours}}$

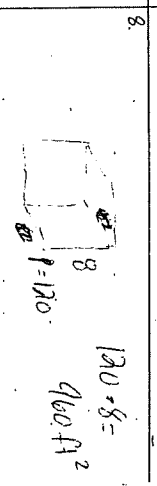
7. $V = L \cdot W \cdot H$
 $V = 15 \cdot 8 \cdot 10$
 $V = \boxed{1200 \text{ in}^3}$



Area of Rectangle = $6 \cdot 4 = 24$
 Area of Triangle = $(5 \cdot 4) \div 2 = 10$
 $24 + 10 = \boxed{34 \text{ cm}^2}$

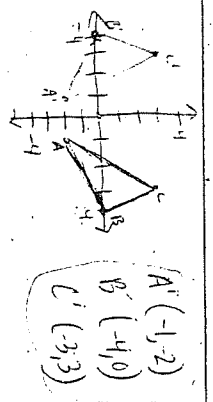
17. $\frac{4.5 \times 10^8}{3 \times 10^4} = \boxed{1.5 \times 10^4}$

3. $\frac{20}{100}$ of $23,900$
 $23,900 \div 100 = 239$
 $239 \times 20 = \boxed{4780}$



13. $C = \pi \cdot d$
 $= 3.14 \cdot 30$
 $= \boxed{94.2}$
 Round to 94 feet

18. $(2 \times 10^{-6})(2.4 \times 10^{-4})$
 $2 \times 2.4 = 4.8$
 $10^{-6} \times 10^{-4} = 10^{-10}$
 $\boxed{4.8 \times 10^{-10}}$



9. $\frac{12 \text{ gallons}}{300 \text{ miles}} = \frac{3 \text{ gallons}}{125 \text{ miles}}$
 $125 \cdot 12 = 1500$
 $1500 \div 300 = \boxed{5 \text{ gallons}}$

14. $A = \pi \cdot r^2$
 $= 3.14 \cdot 4^2$
 $= 3.14 \cdot 16$
 $= 50.24 \text{ in}^2$
 \boxed{B}

19. $\frac{(-2) - (-3) - (-1)}{(-1) - (-2)} = \frac{(2) + 3 + 1}{2} = \frac{6}{2} = \boxed{3}$

5.

win	18	win	$\frac{18}{1055} = \frac{18}{12} = 6 = \boxed{\frac{3}{2}}$
loss	12	loss	
total	30		

10. $7.5 \text{ gallons} \cdot \frac{20 \text{ quarts}}{1 \text{ gallon}} = 150 \text{ quarts}$
 $150 \text{ quarts} \cdot \frac{4 \text{ liters}}{1 \text{ quart}} = \boxed{600 \text{ liters}}$

15. $\frac{4}{3} = 2.1$
 $8.4 = 8 \cdot 2.1$
 $8.4 \div 3 = \boxed{2.8 = 2.8}$

20. $2x + 2(x - 3) + 2$
 $2x + 2x - 6 + 2$
 $4x - 4$