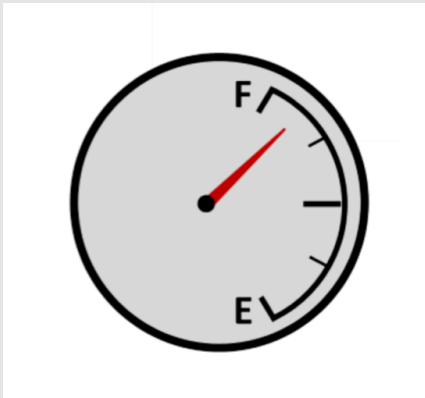


Problem 1

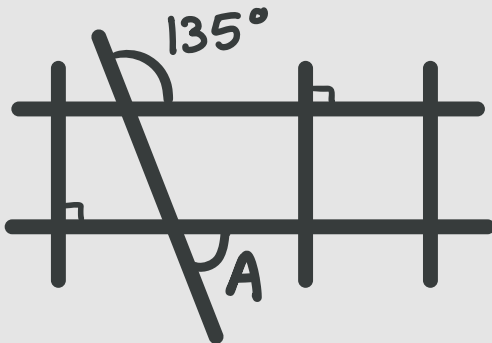
(1) What time is shown on the clock?



(2) About how full is the gas tank?

**Problem 2**

What is the measure of angle A?



Problem 3

What is the smaller dog's weight in pounds?

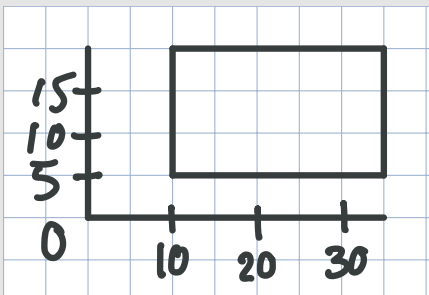
- (A) 20
(B) 60
(C) 30
(D) 15

Large dog
880 ounces
55 pounds

Small dog
320 ounces
? pounds

Problem 4

What is the area of the rectangle?

**Problem 5**

A new coffee maker uses **37%** less energy than the older model. The older model uses \$18.50 worth of energy each year. How much less does it cost to operate the new coffee maker for one year than it costs to operate the older model?

- (A) **\$25.35**
(B) **\$6.85**
(C) **\$9.25**
(D) **\$11.65**

Problem 6

Angela paid **\$8.25** for her lunch. Terri paid 25% more for her lunch than Angela did. How much did Terri pay for her lunch?

- (A) **\$10.31**
- (B) **\$8.50**
- (C) **\$11.25**
- (D) **\$6.19**

Problem 7

Rose has a job painting coffee tables at a warehouse. When she comes to work in the morning, she spends **30** minutes preparing the area where she paints. Then, it takes her **45** minutes to paint each piece of furniture. Let T = time and c = the number of coffee tables.

(1) Which equation shows the time it takes for Rose to prepare and then paint c coffee tables?

- (A) **$T = 30 \times C \times 45$**
- (B) **$T = 45 + 30 \times C$**
- (C) **$T = 45 \times C + 30$**
- (D) **$T = 30 + 45$**

(2) If **$C = 4$** , what does **T** equal?

- (A) **3 hours and 30 minutes**
- (B) **2 hours and 30 minutes**
- (C) **3 hours and 50 minutes**
- (D) **2 hours and 50 minutes**

Problem 8

Use the formulas below to convert between Fahrenheit and Celsius temperatures:

$$^{\circ}\text{C} \times 1.8 + 32^{\circ} = F^{\circ}$$

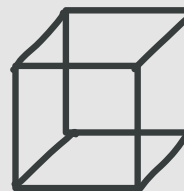
Convert

- (A) 0°C to $^{\circ}\text{F}$
- (B) 115°C to $^{\circ}\text{F}$
- (C) -35°C to $^{\circ}\text{F}$
- (D) 75°F to $^{\circ}\text{C}$

Problem 9

If the volume of box A is 32 cm^3 and we can fit exactly 6 balloons in the box, how many balloons can we fit in box B?

- (A) 10
- (B) 5
- (C) 16
- (D) 9



Box B, Volume = 48 cm^3

Problem 10

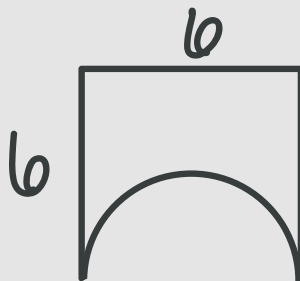
A sports team held a car wash to raise money to help pay for travel costs. They charged \$7 for every car they washed. The team raised \$350 washing cars. Which equation can be used to find the number of cars they washed? Use N for the number of cars they washed.

- (A) $\$350 = \frac{N}{7}$
- (B) $\$350 = \frac{7}{N}$
- (C) $N = \frac{\$350}{7}$
- (D) $N = \frac{7}{350}$

Problem 11

The diagram shows a square with half of a circle cut out. Which of the following is equal to the area of the shape?

- (A) $36 + \pi(3)^2$
 (B) $36 + \frac{1}{2}\pi(3)^2$
 (C) $36 - \frac{1}{2}\pi(3)^2$
 (D) $36 - \pi(3)^2$



Circle
 $A = \pi r^2$

Problem 12

(1) What are the percent equivalents for the following fractions:

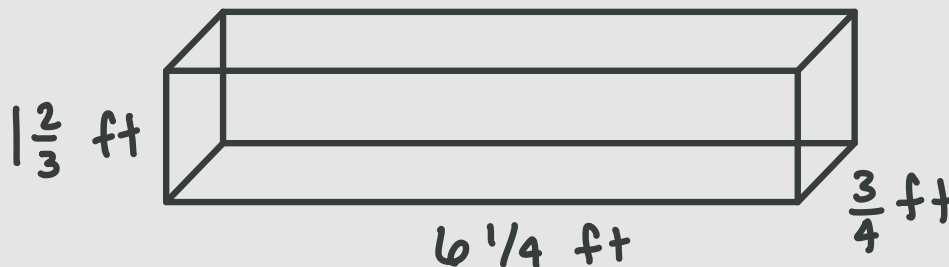
- (1) $\frac{1}{5}$
 (2) $\frac{1}{10}$
 (3) $\frac{3}{4}$

(2) Place the fractions and percents in order from smallest to largest:

$\frac{1}{10}$, 0 , $-\frac{1}{5}$, 75% , -25% , $1\frac{1}{2}$

Problem 13

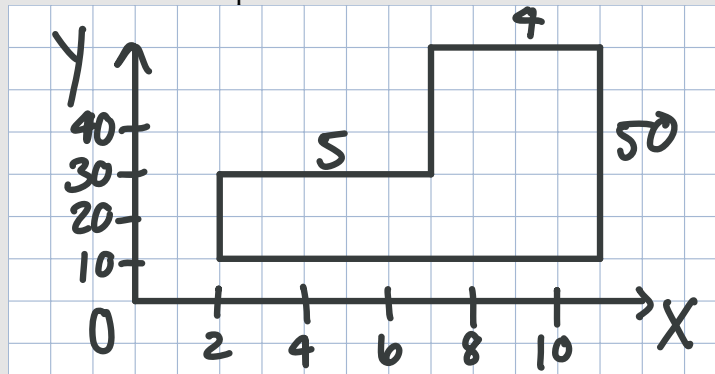
What is the volume of the shape:



Problem 14

What is the perimeter of the shape:

- (A) 118
 (B) 125
 (C) 45
 (D) 59

**Problem 15**

Sammy wasn't feeling well last week and decided to track their temperature every morning. What was the average temperature for Sammy from Tuesday - Saturday?

- (A) 98.6°
 (B) 99.7°
 (C) 101°
 (D) 99.5°

DAY	TEMP
MON	98.6°
TUES	99.2°
WED	99.1°
THURS	99.8°
FRI	100.2°
SAT	100.0°

Problem 16

Which day had the greatest difference between the recorded low and high temperature?

DAY	LOW	HIGH
SUN	-12°	9°
MON	-5°	15°
TUES	0°	7°
WED	0°	11°
THURS	8°	22°
FRI	-2°	11°
SAT	-7°	9°

Problem 17

A customer paid **\$24** for pants after the discount. What was the retail (original) price?

- (A) **\$30**
- (B) **\$32**
- (C) **\$27**
- (D) **\$35**

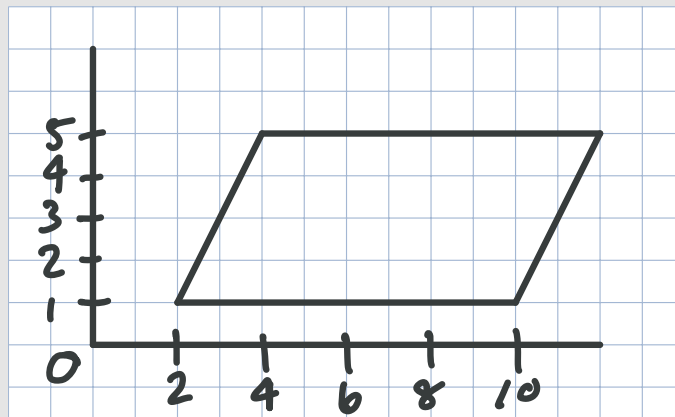
DISCOUNTS

- Shirts 25% off
- Shoes 15% off
- Pants 25% off

Problem 18

Use the diagram to answer the question. What is the area of the quadrilateral?

- (A) **32**
- (B) **24**
- (C) **60**
- (D) **36**



Problem 19

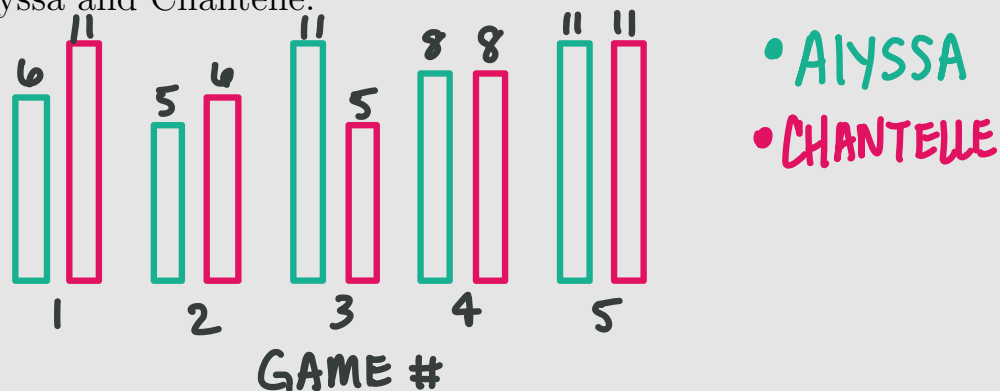
Yvonne made **3.5 gal.** of jam. She wants to pour the jam into **1 pint** jars. How many jars can she fill?

- (A) **8**
- (B) **11.5**
- (C) **24**
- (D) **28**

$$1 \text{ gal.} = 8 \text{ pints}$$

Problem 20

The graph shows the number of points scored by two players on a basketball team, Alyssa and Chantelle.



(1) During which game(s) did Alyssa score **6** points more than Chantelle?

- (A) **Game 3**
- (B) **Game 11**
- (C) **Game 4, 5**
- (D) **Game 4**

(2) What was Chantelle's point average?

- (A) **8.0**
- (B) **7.2**
- (C) **11.0**
- (D) **8.2**

Problem 21

Maria stirred the lemon sauce for *8 min. 30 sec.*, but the sauce needed more stirring so Maria continued for another *3 min 45 sec.* What was the total time the lemon sauce was stirred?

- (A) *11 min. 15 sec.*
- (B) *12 min. 45 sec.*
- (C) *12 min. 15 sec.*
- (D) *11 min. 45 sec.*

Problem 22

Two quarters are tossed at the same time. What is the probability that both coins will show heads?

- (A) *$\frac{1}{3}$*
- (B) *$\frac{1}{2}$*
- (C) *$\frac{2}{3}$*
- (D) *$\frac{1}{4}$*

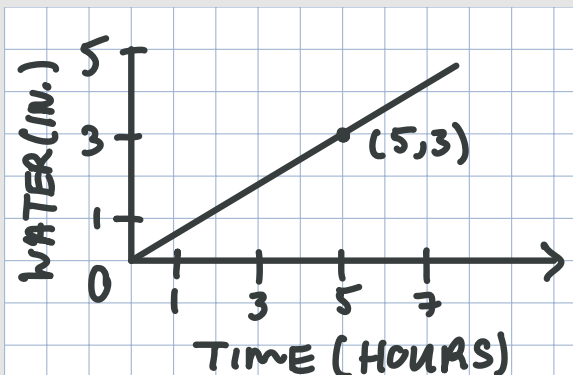
Problem 23

The race times for a track meet are listed in the table below. How much time went by between when Brooklyn and Justice finished the race?

MARY	<i>10 min. 42 sec.</i>
BROOKLYN	<i>8 min. 42 sec.</i>
AISHA	<i>5 min 59 sec.</i>
CASEY	<i>6 min. 55 sec.</i>
JUSTICE	<i>6 min. 35 sec.</i>

Problem 24

A bucket near a sprinkler was slowly filling up with water, as shown in the graph. At what rate was the sprinkler water filling the bucket?

**Problem 25**

Consider this list of test scores:

88%, 79%, 81%, 93%, 91%

(1) What is the average of the test scores when only considering percentages that are an odd number?

(A) 88.8%

(B) 68.8%

(C) 86.4%

(D) 86%

(2) What is the mean, median, and mode of the test scores?