New England Common Assessment Program

Student Work Samples
2012

Grade 8

Mathematics

11 $2x + 6y$

11

$x = 2$ $y = 6$

11

$x \cdot y = 12$ pencils

⓬

This graph is misleading because it dosen't show the lucy Juice results, and the portions of the Jolly Juice and Fruity Juice are incorrect.

⓬

It is misleading because that would mean 70% like Jolly Juice and 30% like Fruity Juice.

13

The value of x is 135° because for an 8 sided polygon, the sum of the interior angle measures is 180(8-2) which is 1,080 divided by 8 is 135°.

13 Sum of angles $= 180(8-2) = 180(6) = 1080$

$\frac{1080}{8} = 135°$ $x = 135°$

⓭

$x = 135°$

13

$$\begin{array}{r} 180 \\ \times\ 6 \\ \hline 1080 \end{array}$$

$$\begin{array}{r} 125 \\ 8\overline{)1080} \\ -8 \\ \hline 20 \\ -16 \\ \hline 40 \end{array}$$

$x = 125^{\circ}$

13

Each angle must be the same value. It is an octagon with 8 sides.

$\boxed{x^\circ = 180^\circ}$

$$\begin{array}{r} 180^\circ \\ \cdot\ 8 \\ \hline 1440 \end{array} \qquad \begin{array}{r} 180 \\ 8\overline{)1440} \\ 1440 \\ \hline 0000 \end{array}$$

13

Sum of Angle Measures in Polygon formula:

$180(8-2) = 1{,}080^\circ = x^\circ$

$180(6)$

$1{,}080$

$$\begin{array}{r} 180 \\ \times\ 6 \\ \hline 1080 \end{array}$$

14

(A) (1) 112 feet for windows
(2) 170 feet for doorways

(B) W X 14 + D X 17 = F

14

A: 282 ft.

B 14W + 17D

14

$$\begin{array}{r} {}^{3}14 \\ \cdot\ 8 \\ \hline 242 \end{array} \qquad \begin{array}{r} 170 \\ +242 \\ \hline 412 \end{array}$$

a. 412 feet

b. 14w + 17d

14

a. $(8 \cdot 14) + (17 \cdot 10) =$

$112 + 170 = \boxed{282 \text{ ft}}$

b. $(w \cdot 8) + (d \cdot 10) = S$

14

A) 14 feet of wood
17 feet of wood

14
17+
31 feet

B) WdtF

15

a) 3,000 dollars

b) 3,000 dollars = 20%

$\times$ 5 $\times$ 5

15,000 dollars = 100%

c) The band had 30% left over and 60% is 3,000 so 30% is 1,500 and on the chart for the football team 1,500 is 10% so the football team shades in another bar on the poster

15

A) $\frac{5000}{10} = 500$

$500 \times 6 = 3000$

\$3000

B) $\frac{2}{10}$ football goal $= \frac{6}{10}$ band goal

$3000 = 3000$

\$15,000 = goal

$\frac{2}{10} = 3000$

$\frac{1}{10} = 1500$

$1500 \cdot 10 = 15{,}000$

C) $\frac{5000}{10} = 500$

$500 \times 3 = 1500$

$\frac{15{,}000}{10} = 1500$ goal.

\$ 1500 = 1 gray bar

15

a)

500
× 4
2000

10% of 5,000 = 500
40% of 5,000 = 2,000

goal = 5,000 = 100%
total = 60%

after 1 month they raised $2,000.00

b)

20% of 5,000 = 1,000
60% of 5,000 = 3,000

500
× 2
1000

3,000
× 5
15,000

it is 15,000 because each 2 blocks would really be 3,000 for 20% of football & 60% of band

c)

30% of 5,000 = 1,500

500
× 3
1500

1 bar can be shaded because each bar is $1,500.

15

(a) $3,000 (b) $15,000

(C) $6,500 - 2 Bars and a $\frac{1}{4}$ of one.

15

a) $3000.

b) we have 20% our goal.
$3000

c) 3 bars can be shaded to show how much the band gave away because each bar is 10%.

15

A. after one month they raised 4,600 dollars.

B. The goal for the football team was 5600 dollars.

C. 5 bars can be shaded grey because at the 100% mark is where the band got 5000 dollars and there is 5 bars left over.