

Geometry Algebra

12/11

① Meal costs \$16.00. Tip = 20%.
Tip = ?

\$3.20

② Price of pumpkin directly proportional to its weight. Pumpkin = 15 pounds cost \$3.25. How much is a 10.4 pound pumpkin?

$$\frac{.65}{3.25} = \frac{15}{3}$$

10.4
217
728
104
208
225.68

②
cost.

Using A proportion to solve:

$$\frac{3.25 \$}{15 \text{ lbs}} = \frac{x \$}{10.4 \text{ lbs}}$$

$$\text{E} \quad \frac{(10.4)(3.25)}{15} = \frac{15x}{15}$$

$$\begin{array}{r} 10.4 \\ .65 \\ \hline 520 \\ 624 \\ \hline 3 \overline{) 6.760} \\ \underline{6.760} \\ \hline \$ 2.25 \end{array}$$

③ $4x - 11 = 6x - 7 \quad x = ?$

$-4 = 2x$

$-2 = x$

④ Reg. pay = \$9.00 per hour for up to 40 hrs/wk.
Each hour over 40 hrs. $\Rightarrow 1\frac{1}{2}$ pay.
How much pay for 43-hours?

$40 \cdot 9 = 360$
 $13.50 \cdot 3 = 40.50$

$\$400.50$

⑤ Members \Rightarrow \$13 per ticket

Non members \Rightarrow \$15 per ticket

total dollars from sale
of 90 member tickets and N
non member tickets?

Ⓐ $N + 90$

Ⓑ $15(N + 13)$

Ⓒ $15(N + 90)$

Ⓓ $15N + 13(90)$

Ⓔ $(15 + 13)N$

⑥ Volume, rectangular solid,
10 cm wide, 20 cm long, 14 cm tall.

2800 cm^3

$$\textcircled{7} \quad a=3 \quad b=-5 \quad c=4$$

$$2a^2b - 5ac^2 = ?$$

$$2(3)^2(-5) - 5(3)(4)^2$$

$$2 \cdot 9 \cdot (-5) - 5 \cdot 3 \cdot 16$$

$$-90 - 240 = \boxed{-330}$$

$$\textcircled{8} \quad (2x^3y)(4x^5y^3)$$

$$\boxed{8x^8y^4}$$

$\textcircled{9}$ Ben/Chi painting room.
 Start with 4 GAL of paint.
 Day 1 \Rightarrow Ben ^{used} = $\frac{1}{4}$ gal Chi ^{used} = $1\frac{1}{2}$ GAL
 GAL. Left?

$$\frac{16}{4} - \frac{1}{4} - \frac{6}{4} = \frac{9}{4} = \boxed{2\frac{1}{4} \text{ GAL}}$$

⑩ $| -9 | - | 7 - 42 | = ?$

$9 - 35 = \boxed{-26}$

|