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# Smarty Pants Puzzles™



Mike told Kevin that he would give him a ride to the movies if Kevin was waiting in front of the city park at 6 p.m. At 5:45 p.m., Kevin walked directly to the city park and then waited there in front of the park until 6:15 p.m. when he walked directly home.



Read the problem and then write whether each sentence is true, false, or unknown based on the information.

- \_\_\_\_\_ 1. Kevin arrived at the park before 6 p.m.
- \_\_\_\_\_ 2. Mike could not have kept his promise to Kevin.
- \_\_\_\_\_ 3. If Kevin arrived at the front of the park at 5:59 p.m., then Mike did not keep his promise to Kevin.
- \_\_\_\_\_ 4. If Kevin arrived home at 6:30 p.m. and it took him more time to walk home than it took him to walk to the front of the park, Mike did not keep his promise to Kevin.

Write each pair of fractions as equivalent fractions with the same denominator, then write  $<$ ,  $>$ , or  $=$  in the  to make each number sentence true.



a  $\frac{1}{6}$    $\frac{1}{4}$  is equivalent to

$$\frac{2}{12} < \frac{3}{12}$$

$$\frac{1}{6} \times \frac{2}{2} = \frac{2}{12} \quad \frac{1}{4} \times \frac{3}{3} = \frac{3}{12}$$

b  $\frac{2}{3}$    $\frac{3}{5}$  is equivalent to

$$\frac{\quad}{\quad} \quad \quad \quad \frac{\quad}{\quad}$$

c  $\frac{5}{6}$    $\frac{7}{9}$  is equivalent to

$$\frac{\quad}{\quad} \quad \quad \quad \frac{\quad}{\quad}$$

d  $\frac{1}{2}$    $\frac{1}{4}$  is equivalent to

$$\frac{\quad}{\quad} \quad \quad \quad \frac{\quad}{\quad}$$

e  $\frac{2}{3}$    $\frac{7}{9}$  is equivalent to

$$\frac{\quad}{\quad} \quad \quad \quad \frac{\quad}{\quad}$$

Make **change** like a clerk.



\$1.00  
1.00  
1.00  
.10  
.01  
.01  
3.12



ABC Store

05/16/2010

Cash Receipt

\$1.00 butter  
2.09 eggs  
2.99 bread  
.80 candy  
\$6.88 TOTAL

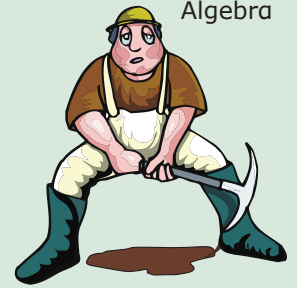


Fill in the table with the fewest bills and coins needed to total the amount in the change column.



change	\$1	25¢	10¢	5¢	1¢
\$3.12	3		1		2
\$2.30					
\$1.50					
\$4.36					
\$3.63					
\$1.86					
\$2.91					
\$1.47					
\$4.74					
\$1.89					
\$ .99					
\$2.49					

Find the missing numbers.



a  $82 \times 6 = \square$

b  $5 \overline{)205}$

c  $64 \times \square = 448$

d  $\square \overline{)300}^{60}$

e  $26 \times \square = 208$

f  $9 \overline{)378}$

g  $19 \times 3 = \square$

h  $7 \overline{) \square}^{12}$

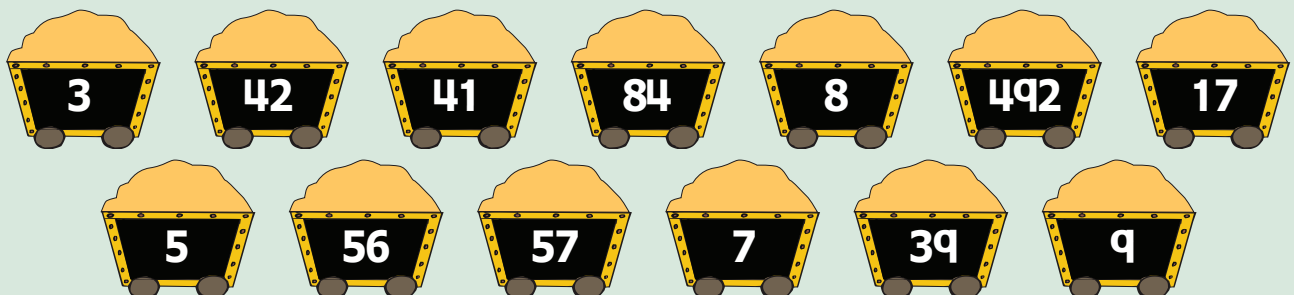
i  $84 \times \square = 252$

j  $\square \overline{)144}^{16}$

k  $\square \times 8 = 448$

l  $4 \overline{)156}$

Which number below was not an answer above?

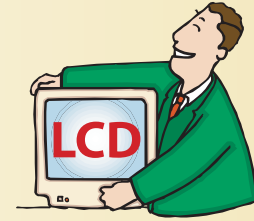




Unlike fractions are fractions with different denominators. They can be written with the same denominator by finding the smallest number that both denominators can evenly divide into.

The lowest common denominator (LCD) is found by writing the multiples of each denominator until a common number is found.

$\frac{1}{4}$	4: 4, 8, 12	$\frac{3}{12}$
$\frac{2}{3}$	3: 3, 6, 9, 12	$\frac{8}{12}$



Complete the table.

	<u>LCD</u>					
a	<u>6</u>	$\frac{1}{2} + \frac{1}{3}$	$= \frac{3}{6} + \frac{2}{6}$	$= \frac{5}{6}$		
r	_____	$\frac{1}{4} + \frac{1}{2}$	$= \text{---} + \text{---}$	$= \text{---}$		
y	_____	$\frac{1}{6} + \frac{1}{4}$	$= \text{---} + \text{---}$	$= \text{---}$		
e	_____	$\frac{1}{6} + \frac{5}{9}$	$= \text{---} + \text{---}$	$= \text{---}$		
f	_____	$\frac{1}{2} + \frac{2}{5}$	$= \text{---} + \text{---}$	$= \text{---}$		

Multiply or divide, then circle your answer on the pyramids below.



1

$$\begin{array}{r} 48 \\ \times 6 \\ \hline \end{array}$$

2

$$\begin{array}{r} 461 \\ \times 5 \\ \hline \end{array}$$

3

$$\begin{array}{r} 652 \\ \times 4 \\ \hline \end{array}$$

4

$$\begin{array}{r} 1,285 \\ \times 9 \\ \hline \end{array}$$

5

$$\begin{array}{r} 12 \\ \times 45 \\ \hline \end{array}$$

6

$$\begin{array}{r} 78 \\ \times 26 \\ \hline \end{array}$$

7

$$\begin{array}{r} 149 \\ \times 38 \\ \hline \end{array}$$

8

$$\begin{array}{r} 1,605 \\ \times 19 \\ \hline \end{array}$$

9

$$6 \overline{)30}$$

10

$$9 \overline{)54}$$

11

$$4 \overline{)136}$$

12

$$5 \overline{)315}$$

13

$$4 \overline{)212}$$

14

$$7 \overline{)133}$$

15

$$8 \overline{)2,176}$$

16

$$10 \overline{)420}$$

