

M2L17/18 - Estimating Quotients

Application Problem

There were 568 lbs of grapes in 2 boxes.

lbs of grapes	852 lbs	$852 \div 3 =$
	284 284 284	
	?	

$$\begin{array}{r} 284 \\ 3 \overline{) 852} \\ \underline{-6} \downarrow \\ 25 \\ \underline{-24} \downarrow \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

$$\begin{array}{r} 284 \\ \times 2 \\ \hline 568 \end{array}$$

Fluency: Rounding

$21 \approx 20$

$37 \approx 40$

$16 \approx 20$

$54 \approx 50$

$73 \approx 70$

$65 \approx 70$

$25 \approx 30$

Multiples of 10, 100, 1000

$700 \div 10 = 70$

$800 \div 20 = 40$

$15,000 \div 30 = 500$

$15,000 \div 300 = 50$

$15,000 \div 3000 = 5$

$450,000 \div 50 = 9000$

$21,000 \div 300 = 70$

M2L17-18: Estimating Quotients

Divisor: Round first

$$149 \div \boxed{71} \approx$$

$$\frac{140}{149} \div \frac{70}{71} = 2$$
$$149 : 7 \boxed{14}$$

140

$$427 \div 58 \approx$$

$$\frac{420}{427} \div \frac{60}{58} = 7$$
$$427 : 6, 12, 18, 24, 30, 36, 42$$

420

$$293 \div 42 \approx$$

$$\frac{280}{293} \div \frac{40}{42} = 7$$
$$293 : 4, 8, 12, 16, 20, 24, \boxed{28, 32}$$

280

$$2691 \div 48 \approx$$

$$\frac{2500}{2691} \div \frac{50}{48} = 50$$
$$2691 : 5, 10, 15, 20, \boxed{25, 30}$$

2500

$$9215 \div 95$$

$$\frac{9000}{9215} \div \frac{100}{95} = 90$$
$$9215 : 1, 2, 3, 4, 5, 6, 7, 8, 9$$

9000

$$\frac{9000}{9215} \div \frac{90}{95} = 100$$
$$9215 : 9$$

9000

2659: 3, 6, 9, 12, 15, 18, 21, 24, 27^{*}

2700

9155: 3, 6, 9

9000

Name _____

Date _____

1. Estimate the quotients for the following problems. The first one is done for you.

a. $5,738 \div 21$ $\approx 6,000 \div 20$ $= 300$	b. $2,659 \div 28$ $\approx \frac{2700}{30}$ $= 90$	c. $9,155 \div 34$ $\approx \frac{9000}{30}$ $= 300$
d. $1,463 \div 53$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	e. $2,525 \div 64$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	f. $2,271 \div 72$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$
g. $4,901 \div 75$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	h. $8,515 \div 81$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	i. $8,515 \div 89$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$
j. $3,925 \div 68$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	k. $5,124 \div 81$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	l. $4,945 \div 93$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$
m. $5,397 \div 94$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	n. $6,918 \div 86$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$	o. $2,806 \div 15$ $\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$ $= \underline{\hspace{2cm}}$