

WARM UP GRADE 7

Show work and find the product or the quotient

1) a) 25.27×3.56

b) $72.27 \div 1.1$

2) Use tiles to find the quotient $2.4 \div 0.4$ (Don't need to draw but use terms)

WARM UP GRADE 7

Show work and find the product or the quotient

1) a) 25.27×3.56

$$\begin{array}{r} 25.27 \\ \times 3.56 \\ \hline 15162 \\ 12635 \\ 7581 \\ \hline 89.9612 \end{array}$$

b) $72.27 \div 1.1$

$$1.1 \overline{) 72.27}$$

$$\begin{array}{r} 65.7 \\ 11 \overline{) 722.7} \\ \underline{-66} \\ 62 \\ \underline{-55} \\ 77 \\ \underline{-77} \\ 0 \end{array}$$

2) Use tiles to find the quotient $2.4 \div 0.4$ (Don't need to draw but use terms)

$$0.4 \overline{) 2.4} \longrightarrow 4 \overline{) 24.0}$$
$$\begin{array}{r} 4 \\ 4 \overline{) 24.0} \\ \underline{24} \\ 0 \end{array}$$

WARM UP GRADE 7

Solutions

Show work and find the product or the quotient

1)

a) 25.27×3.56

$$\begin{array}{r} 25.27 \\ \times 3.56 \\ \hline 15162 \\ 126350 \\ 758100 \\ \hline 89.9612 \end{array}$$

b) $72.27 \div 1.1$

$$\begin{array}{r} 65.7 \\ 1.1 \overline{) 72.27} \\ \underline{-66} \\ 62 \\ \underline{-55} \\ 77 \\ \underline{-77} \\ 0 \end{array}$$

2) Use tiles to find the quotient $2.4 \div 0.4$ (Don't need to draw but use terms)

$$24 \text{ tenths} \div 4 \text{ tenths}$$

$$= \boxed{6}$$

Homework Solutions

5a) $1.5 \div 0.6$

$$\begin{array}{r} 0.6 \overline{) 1.5} \\ \times 10 \quad \times 10 \end{array} \rightarrow$$

$$\begin{array}{r} 2.5 \\ \underline{6) 15.0} \\ 12 \quad \downarrow \\ \underline{30} \\ 30 \\ \underline{0} \end{array}$$

b) $2.24 \div 0.7$

$$0.7 \overline{) 2.24} \rightarrow$$

$$\begin{array}{r} 3.2 \\ \underline{7) 22.4} \\ 21 \quad \downarrow \\ \underline{14} \\ 14 \\ \underline{0} \end{array}$$

c) $1.28 \div 0.8$

$$\begin{array}{r} 0.8 \overline{) 1.28} \\ \times 10 \quad \times 10 \end{array} \rightarrow$$

$$\begin{array}{r} 1.6 \\ \underline{8) 12.8} \\ 8 \quad \downarrow \\ \underline{48} \\ 48 \\ \underline{0} \end{array}$$


d) $2.16 \div 0.9$

$$0.9 \overline{) 2.16} \rightarrow$$

$$\begin{array}{r} 2.4 \\ \underline{9) 21.6} \\ 18 \quad \downarrow \\ \underline{36} \\ 36 \\ \underline{0} \end{array}$$



1) A stack of flattened cardboard boxes sits in the corner of the classroom . The stack is 74.4 cm high. When one box is flattened out it has a height of 0.8 cm, how many boxes are stacked in the corner/ boxes are flattened has a total height of

 74.4 cm } given total height → ÷

$$74.4 \text{ cm} \div 0.8 \text{ cm}$$

Not Whole → $0.8 \overline{) 74.4 \text{ cm}}$

$$\begin{array}{r} 93. \\ 8 \overline{) 744.} \\ \underline{72} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

There are 93 boxes in the stack.

Class/Homework

pg. 106 & 107

4, 5
1.5 +

#7, #8, #9, #10, #11, #12, #13

from calculator

ex) 1a) $0.8 \div 0.1$

8 tenths \div 1 tenths = 8

(Don't draw out just rewrite)

_____ (3 days time, Test on
First half of Unit 3)

1. Use Base Ten Blocks to divide. Record your work on grid paper.

a) $0.8 \div 0.1$ b) $1.2 \div 0.3$ c) $2.7 \div 0.6$ d) $2.2 \div 0.4$

a) 8 tenths \div 1 tenth = 8

b) 12 tenths \div 3 tenths = 4 (4 groups of 3 tenths)

c) 27 tenths \div 6 tenths

27 tenths \div 3 tenths = 9 groups

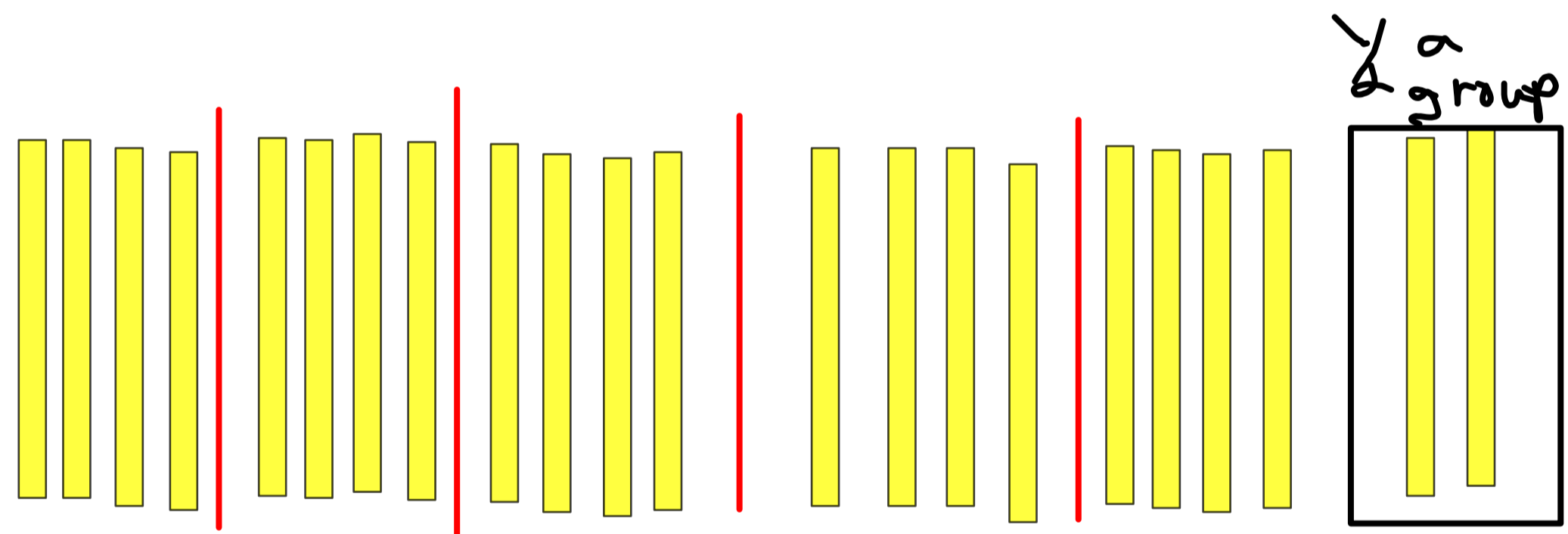
so $4\frac{1}{2}$ groups of 6
4.5

d) 22 tenths \div 4 tenths

20 tenths \div 4 tenths = 5

24 tenths \div 4 tenths = 6

so 22 tenths \div 4 tenths = 5.5



2. Divide. Describe any patterns you see.

a) $124.5 \div 10$ 12.45 b) $124.5 \div 0.1$ 1245

$124.5 \div 100$ 1.245 $124.5 \div 0.01$ 12450

$124.5 \div 1000$ 0.1245 $124.5 \div 0.001$ 124500

$124.5 \div 10000$ $124.5 \div 0.0001$ 1245000

0.01245

3. Why do all these division statements have 6 as the answer?

- a) $30 \div 5$ b) $3.0 \div 0.5$ c) $0.3 \div 0.05$ d) $300 \div 50$

Which one is easiest to calculate? Explain.

They are basically the same, but the decimals are in different places

a) $30 \div 5 = 6$

b) $3.0 \div 0.5 = 6$

c) $0.3 \div 0.05 \times 100$

d) $300 \div 50 = 6$

4. Use paper and pencil to divide.

a) $15 \div 0.6$

b) $224 \div 0.7$

c) $128 \div 0.8$

d) $216 \div 0.9$

$$\begin{array}{r} 0.6 \overline{) 15} \\ \underline{2.6} \\ 6 \overline{) 15.0} \\ \underline{12} \downarrow \\ 30 \\ \underline{30} \\ 0 \end{array}$$

$$\begin{array}{r} 0.7 \overline{) 2.24} \\ \underline{3.2} \\ 7 \overline{) 22.4} \\ \underline{21} \downarrow \\ 14 \\ \underline{14} \\ 0 \end{array}$$

$$\begin{array}{r} 0.8 \overline{) 1.28} \\ \underline{1.6} \\ 8 \overline{) 12.8} \\ \underline{8} \downarrow \\ 48 \\ \underline{48} \\ 0 \end{array}$$

d)

$$\begin{array}{r} 0.9 \overline{) 2.16} \\ \underline{2.4} \\ 9 \overline{) 21.6} \\ \underline{18} \downarrow \\ 36 \\ \underline{36} \\ 0 \end{array}$$

7) Toonie is 0.2cm thick. How many toonies are in a stack of toonies 17.4cm high?

$$0.2 \overline{) 17.4} \rightarrow 2 \overline{) 174.0}$$

$$\begin{array}{r} 87 \\ 2 \overline{) 174.0} \\ \underline{-16} \\ 14 \\ \underline{-14} \\ 0 \end{array}$$

There is 87 toonies

8) Area = 22.32 m²
width = 0.8 m
length = ?

$$\text{length} = \text{Area} \div \text{width}$$

$$\text{length} = 22.32 \div 0.8$$

$$0.8 \overline{) 22.32} \rightarrow 8 \overline{) 223.2}$$

$$\begin{array}{r} 27.9 \\ 8 \overline{) 223.2} \\ \underline{-16} \\ 63 \\ \underline{-56} \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

length is 27.9 m

9) 0.4 kg cost \$1.34

a) Estimate
So 0.4 is close to 0.5 kg
2 x 0.5 = 1 kg thus Estimate cost is 2 x 1.34 ≈ 2.68

b) How many 0.4 kg are in 1 kg?

$$0.4 \overline{) 1} \rightarrow 4 \overline{) 10.0}$$

$$\begin{array}{r} 2.5 \\ 4 \overline{) 10.0} \\ \underline{-8} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

2.5 x cost

$$\begin{array}{r} 1.34 \\ \times 2.5 \\ \hline .670 \\ + 2680 \\ \hline 3.350 \end{array}$$

Actual cost for 1 kg is \$3.35

c) Suppose you spend \$10 on oranges. What mass did you buy?

$$\text{---} \times 1.34 = \$10 \text{ or}$$

$$10 \div 1.34 = 7.462686567$$

for 0.4 kg
Groups of 0.4 kg

use calculator

$$7.462686567 \times 0.4 \text{ kg} = 2.98507$$

↙
3 kg

10) fabric length = 9.88m

Alex needs 14, 0.8m pieces

a) How many 0.8 pieces can Alex cut from the remnant?

$$9.88 \div 0.8$$

$$0.8 \overline{) 9.88} \rightarrow$$

$$\begin{array}{r} 12.35 \\ 8 \overline{) 98.80} \\ \underline{-8} \\ 18 \\ \underline{-16} \\ 28 \\ \underline{24} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

Alex can get 12.35 out of the fabric (Assume no waste)

b) Will Alex have all the fabric he needs?
No, he will need more

c) How much more is needed?

$$\begin{array}{r} 14 \\ \times 0.8 \\ \hline 11.2 \end{array}$$

11.2 needed

has 9.88

$$\begin{array}{r} 11.20 \\ - 9.88 \\ \hline 1.32 \end{array}$$

1.32

Need 1.32 m more

Method 2

or

$$\begin{array}{r} 14.00 \text{ pieces} \\ - 12.35 \text{ has pieces} \\ \hline 1.65 \text{ pieces needed} \end{array}$$

$$\begin{array}{r} 1.65 \text{ # of pieces} \\ \times 0.8 \text{ m length of} \\ \hline 1.320 \end{array}$$

Need 1.32 m more

d) Needs 14, 0.7m pieces of fabric

$$0.7 \overline{) 9.88} \rightarrow 7 \overline{) 98.800000}$$

Remnant of 9.88m will do 14.1 pieces
So yes he will have enough if piece size is 0.7

$$\begin{array}{r} 14.1112857 \\ 7 \overline{) 98.800000} \\ \underline{7} \\ 28 \\ \underline{28} \\ 08 \\ \underline{7} \\ 18 \\ \underline{14} \\ 40 \\ \underline{35} \\ 50 \\ \underline{49} \\ 10 \\ \underline{7} \\ 10 \\ \underline{7} \\ 30 \\ \underline{28} \\ 20 \\ \underline{14} \\ 60 \\ \underline{56} \\ 40 \\ \underline{35} \\ 50 \\ \underline{49} \\ 10 \end{array}$$

Method 2

$$\begin{array}{r} 14 \\ \times 0.7 \\ \hline 9.8 \end{array}$$

9.8 is needed

has 9.88 so yes

11) $\underline{\quad} \div \underline{\quad} = 0.12$
 \downarrow

a) $\underline{3} \times 0.12 = \underline{0.36}$
 so

Many answers

$0.36 \div 3.0 = 0.12$

b) $\underline{1.3} \times 0.12 =$

$$\begin{array}{r} 1.3 \\ \times 0.12 \\ \hline 26 \\ 130 \\ \hline 156 \end{array}$$

so

$0.156 \div 1.3 = 0.12$

12) Alicia earned \$346.88 in 37.5 hours
 How much per hour?

$37.5 \overline{) 346.88} \rightarrow 375$

Alicia earns \$9.25 per hour

$$\begin{array}{r} 9.2501\dots \\ \underline{375} \overline{) 3468.800} \\ -3375 \\ \hline 938 \\ \underline{750} \\ \hline 1880 \\ \underline{1875} \\ \hline 500 \\ \hline 500 \\ \hline 000 \end{array}$$

13) $237 \div 7 = 33.857$

$$\begin{array}{r} 33.857\dots \\ \underline{7} \overline{) 237.000} \\ -21 \\ \hline 27 \\ \underline{21} \\ \hline 60 \\ \underline{56} \\ \hline 40 \\ \underline{35} \\ \hline 50 \end{array}$$

a) $237 \div 0.7$

\Downarrow
 $2370 \div 7$

\Downarrow
 338.57

b) $2.37 \div 0.07$

\Downarrow
 $237 \div 7$

33.857

c) $23.7 \div 7$

3.3857

d) $2370 \div 70$

$237 \div 7 = 33.857$