Warm up Grade 6

Date: Dec. 2

1) A student divided 20.508 by 6 and got 0.3418

a) Without dividing, how do you know this is incorrect?

b) What do you think the student did wrong?

c) What is the correct answer? Show work.

a) $20.508 \div 6 \neq 0.3418$

Estimate

$18 \div 6 = 3$

b) Placed the decimal in the wrong spot

c) 3.418

Practice

1. Use Base Ten Blocks to divide.

a) 6.25 ÷ 5 b) 4.24 ÷ 4 c) 1.68 ÷ 3 d) 3.9 ÷ 6

a) $5\overline{)6.25}$ 1.25; −5, 12, −10, 25, −25, 0

b) $4\overline{)4.24}$ 1.06; −4, 04, −0, 24, −24, 0

c) $3\overline{)1.68}$ 0.56; −15, 18, −18, 0

d) $6\overline{)3.9}$ 0.65; −36, 30, −30, 0

2. The decimal point is missing in each quotient. Use estimation to place each decimal point.

a) 8.2 ÷ 2 = 41 8/2 = 4

b) 3.81 ÷ 3 = 127 3/3 = 1

c) 1.992 ÷ 8 = .249 2/8 =0.25

d) 9.45 ÷ 5 = 189 10/5 = 2

e) 11.916 ÷ 9 = 1324 9/9 = 1

f) 62.8 ÷ 8 = 785 64/8 = 8

3. Estimate each quotient. Which strategies did you use?

a) 26.34 ÷ 8 b) 15.27 ÷ 3 c) 2.304 ÷ 4

d) 5.8 ÷ 8 e) 8.088 ÷ 6 f) 2.316 ÷ 2

a) 24 / 8 = 3 benchmark

b) 15 / 3 = 5 front end or bench

c) 2.4 / 4 = 0.8 bench mark

d) 5.6 / 8 = 0.7 bench

d) 6/ / = 1

f) 2.4 / 2 = 1.2

You Try

Jim can walk 4.56 km in 8 minutes.

Ken can walk 5.88 km in 12 minutes. Who travelled the farthest in 1 min? Show work

Jim

$$\begin{array}{r} 0.57 \\ 8\overline{)4.56} \\ -0\downarrow \\ \hline 45 \\ -40 \\ \hline 56 \\ -56 \\ \hline 0 \end{array}$$

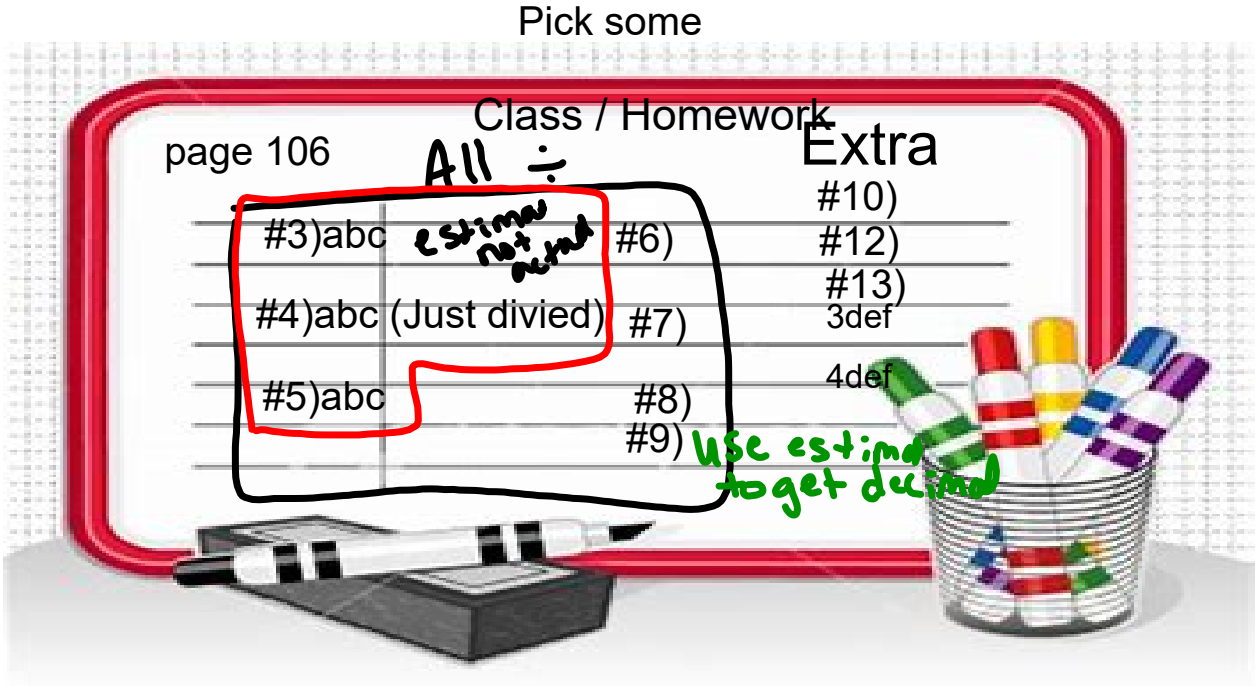
Jim travels 0.57 km in 1 min

Ken

$$\begin{array}{r} 0.49 \\ 12\overline{)5.88} \\ -0\downarrow \\ \hline 58 \\ -48\downarrow \\ \hline 108 \\ -108 \\ \hline 0 \end{array}$$

Ken can travel 0.49 km in 1 min.

Jim travels more in 1 min.


Pick some
Class / Homework
page 106
All ÷
#3)abc estimate not needed
#4)abc (Just divied)
#5)abc
#6)
#7)
#8)
#9) Use estimate to get decimal
Extra
#10)
#12)
#13)
3def
4def

TIP

4. Divide. Multiply to check your answers.

a) 27.025 ÷ 5 b) 3.42 ÷ 6 c) 7.735 ÷ 7

d) 16.072 ÷ 8 e) 30.9 ÷ 5 f) 3.438 ÷ 6

Step 1: Estimate

25 ÷ 5 = 5

Step 3:

27.025 ÷ 5 = 5.405

Step 2: Actual Answer

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5 | 27025 | 5 x 4000
    20000
-    7025 | 5 x 1000
     5000
     2025 | 5 x  400
-    2000
       25 | 5 x    5
-      25
        0 |   5405
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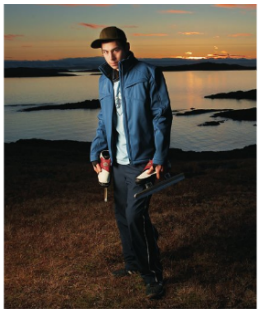
Step 4:
Check by Multiplying

5.405 x 5 = 27.025

5. Estimate to choose the correct quotient for each division question.

	Question	Possible Quotients		
a)	8.124 ÷ 6	1.354	13.54	135.4
b)	37.92 ÷ 3	0.1264	1.264	12.64
c)	7.624 ÷ 8	0.953	9.53	95.3

6. Aqpik Peter is a young Inuit speed skater from Nunavut. He is one of 3 First Nations athletes being showcased for the 2010 Vancouver Olympics. At practice, Aqpik skated 2.75 km in 5 min. About how far did Aqpik skate in 1 min?



7. Eric cycled 2.25 km in 5 min.
Josie cycled 2.72 km in 8 min.
Who travelled farther in 1 min?
Show your work.

8. Sharma paid $58.50 to board her cat at a kennel in Yellowknife for 5 days.
Her friend Miles paid $12.50 each day to board his at a different kennel for 5 days.
Who paid the lesser amount?
Explain how you know.

9. The decimal point in some of these quotients is in the wrong place. Identify the mistakes, then write each quotient with the decimal point in the correct place.

a) $44.8 \div 8 = 0.56$
b) $14.805 \div 5 = 2.961$
c) $3.15 \div 6 = 5.25$
d) $8.127 \div 1 = 0.8127$

10. A student divided 1.374 by 4 and got 3.435.
a) Without dividing, how do you know the answer is incorrect?
b) What do you think the student did wrong?
c) What is the correct answer? How can you check?

11. Write a story problem that can be solved by dividing 14.28 by 3.
Trade problems with a classmate and solve your classmate's problem.

13. In good weather, Hannah rides her bike to school and back each day.
One week, Hannah rode her bike on 4 days.
That week, Hannah rode 10.832 km in total.
The following week, she rode her bike all 5 days.
How far did Hannah ride the second week?