Try Number Sense Card 236B

Divide Two Decimals

Example 1 **Divide.** $1.3\overline{)0.546}$

Step 1 **Change the problem to an equivalent problem with a whole-number divisor.**

$1.3\overline{)0.546}$

$13\overline{)5.46}$

Step 2 **Divide.**

$$\begin{array}{r} 0.42 \\ 13\overline{)5.46} \\ -52\downarrow \\ 26 \\ -26 \\ 0 \end{array}$$

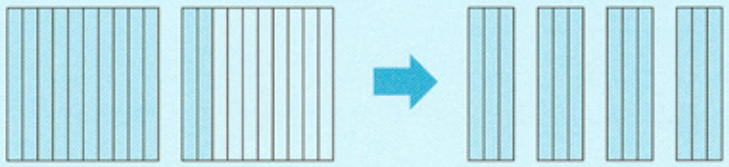
Answer: 0.42

Set A **Divide.**

1. $0.02\overline{)1.456}$
2. $0.33\overline{)0.66}$
3. $1.7\overline{)0.51}$
4. $1.9\overline{)7.6}$
5. **Solve.** Tarik's plane took off at 7:45 A.M. and was scheduled to land at 11:20 A.M. Bad weather delayed the plane's landing by 1 hour 15 minutes. How long was Tarik's plane in the air?
6. $1.9\overline{)5.7}$
7. $0.04\overline{)0.20}$
8. $1.4\overline{)0.70}$
9. $0.08\overline{)0.416}$
10. **Solve.** It costs $1.25 to wash one load of laundry. Stan set aside a total of $16.25 for laundry. How many loads of laundry could he wash with this money?

Skill: Divide a decimal in tenths, hundredths, or thousandths by a decimal in tenths or hundredths.

Example 2 **Divide.** $0.3\overline{)1.2}$



Answer: 4

Set B

Divide.

1. $0.09\overline{)2.754}$
2. $4.9\overline{)0.98}$
3. $0.16\overline{)0.48}$
4. $1.3\overline{)3.9}$
5. **Solve.** The diameter of Earth is 7,920 miles. What is Earth's circumference? ($C = \pi d$. Use 3.14 for π.)
6. $0.09\overline{)0.36}$
7. $1.2\overline{)0.996}$
8. $0.13\overline{)0.949}$
9. $1.8\overline{)7.38}$
10. **Solve.** An ancient Greek container called an *amphora* had a capacity of 10.3 gallons. An ancient Roman amphora had a capacity of 6.84 gallons. How many times would the contents of one Roman amphora fit into one Greek amphora? (Round to the nearest hundredth.)

Set C

Divide.

1. $0.19\overline{)0.969}$
2. $0.12\overline{)0.84}$
3. $1.1\overline{)8.8}$
4. $1.3\overline{)0.793}$
5. **Solve.** Greek philosopher Socrates lived from 470–399 B.C. His student, Plato, lived from 428–348 B.C. Who lived longer, and by how many years?
6. $0.13\overline{)9.10}$
7. $1.2\overline{)9.84}$
8. $2.4\overline{)0.048}$
9. $0.06\overline{)4.374}$
10. **Solve.** Sheila made a cardboard mobile with 3 triangles. One triangle is 3 inches tall and 4 inches wide. Each of the other triangles is twice as tall and twice as wide as the first triangle. How many square inches of cardboard were used?

Set A

1.	72.8
2.	2
3.	0.3
4.	4
5.	4 hours 50 minutes
6.	3
7.	5
8.	0.5
9.	5.2
10.	13 loads

236A
Answers

Set B	▶
1.	30.6
2.	0.2
3.	3
4.	3
5.	24,868.8 miles
6.	4
7.	0.83
8.	7.3
9.	4.1
10.	1.51 times

Set C	▶
1.	5.1
2.	7
3.	8
4.	0.61
5.	Plato, by 9 years
6.	70
7.	8.2
8.	0.02
9.	72.9
10.	54 square inches