



SKILL 27: Deciding Where to Place the First Digit

You can estimate or use a rule to help you place the first digit of your quotient.

Example 1

Divide: $267 \div 3$.

Estimate $267 \div 3$. Since $270 \div 3 = 90$, you place the first digit above the tens.

Rule: If the first digit of the dividend is **less than** the divisor, begin writing the quotient above the second digit of the dividend.

$$\begin{array}{r} 8 \\ 3 \overline{)267} \\ \underline{-24} \\ 2 \end{array} \quad 2 < 3, \text{ so begin writing above the 6.}$$

There are eight 3s in 26. ($8 \times 3 = 24$)

Multiply: $8 \times 3 = 24$.

Subtract. Compare: $2 < 3$.

Check. Multiply: $89 \times 3 = 267$.

$$\begin{array}{r} 89 \\ 3 \overline{)267} \\ \underline{-24} \downarrow \\ 27 \\ \underline{-27} \\ 0 \end{array}$$

Bring down the 7. There are nine 3s in 27.

Multiply: $9 \times 3 = 27$.

Subtract. Compare: $0 < 3$.

Example 2

Divide: $735 \div 5$.

Rule: If the first digit of the dividend is **greater than or equal to** the divisor, begin writing the quotient above the first digit of the dividend.

$$\begin{array}{r} \square \\ 5 \overline{)735} \end{array} \quad 7 > 5, \text{ so begin writing above 7.}$$

$$\begin{array}{r} 147 \\ 5 \overline{)735} \end{array}$$

Guided Practice

Place an "X" where you will place the first digit of the quotient.

1. $4 \overline{)428}$

2. $6 \overline{)372}$

3. $4 \overline{)182}$

4. $2 \overline{)136}$

5. $5 \overline{)688}$

6. $7 \overline{)910}$

SKILL 27: Practice

Divide.

1. $7 \overline{)381}$

2. $5 \overline{)208}$

3. $6 \overline{)682}$

4. $5 \overline{)723}$

5. $8 \overline{)329}$

6. $4 \overline{)173}$

7. $8 \overline{)489}$

8. $4 \overline{)673}$

9. $5 \overline{)571}$

10. $4 \overline{)925}$

11. $6 \overline{)674}$

12. $9 \overline{)255}$

Solve.

13. It takes 7 yards of fabric to cover each chair. How many chairs can the upholsterer cover with 861 yards of fabric? _____

14. Mr. Anderson spent \$168 to have his lawn mowed 6 times. What was the average cost of each mowing? _____

TEST PREP

15. Candace's Flower Shop bought 8 dozen roses for \$128. How much did one dozen cost?

Skill 27

A \$16

C \$160

B \$18

D \$180

16. Model paints were on sale for \$6 each. Calvin purchased \$78 worth of paints. How many paints did he purchase?

Skill 25

F 12

H 14

G 13

J 15