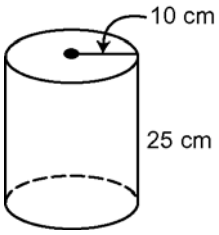
Chapter 6 Warm-Up

Section 6.1

1. Estimate the surface area of this cylinder. Show your thinking.



2. Calculate the surface area of the cylinder in #1.

3. Draw a net for the cylinder in #1.

4. Sketch and label the top and side views of the cylinder in #1.

5. Sketch and label the top, front, and side views of your calculator.

Mental Math

6. A circle has a radius of 2 m. Estimate the perimeter of the circle.

7. Estimate the area of the circle in #6.

8. What is $33\frac{1}{3}$ % as a fraction?

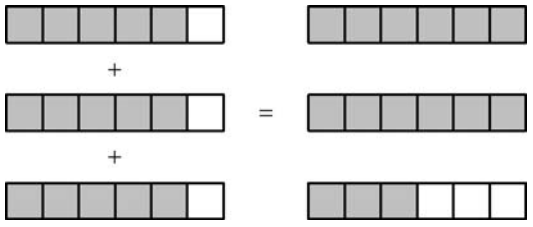
9. Show 1.25 as a percent and a reduced fraction.

10. Convert $\frac{22}{25}$ to a decimal and a percent.

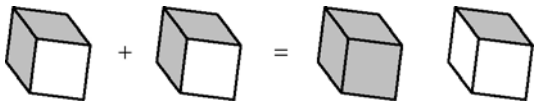
Section 6.2

For #1 and #2, write the multiplication statement being modelled.

1.



2.



Use manipulatives or diagrams to answer #3 and #4.

3. $4 \times \frac{3}{8}$

4. $7 \times \frac{1}{2}$

5. All views of a right prism are identical. What kind of right prism is it?

Mental Math

6. A bicycle is on sale for 10% off the original price of $300. What is the sale price?

7. Describe a second way to mentally calculate the sale price.

8. Show $\frac{5}{8}$ as a percent.

9. Show 0.5% on a hundred grid.

10. Show 45.5% on a hundred grid.

Section 6.3

Use manipulatives or diagrams to answer #1 to #5.

1. $\frac{1}{6} \div 3$

2. $\frac{3}{4} \div 2$

3. $\frac{2}{3} \div 4$

4. $5 \times \frac{2}{5}$

5. $18 \times \frac{1}{9}$

Mental Math

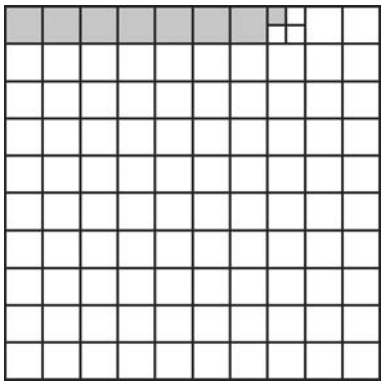
6. How could you do #5 using mental math?

Using the method you developed in #6, do #7 and #8.

7. $8 \times \frac{1}{4}$

8. $15 \times \frac{1}{5}$

9. Show this number as a percent and a decimal.



10. Show 105.3% as a decimal.

Section 6.4

Estimate and calculate each product for #1 to #3.

1. $\frac{3}{4} \times \frac{2}{5}$

2. $\frac{1}{6} \times \frac{1}{3}$

3. $\frac{5}{7} \times \frac{1}{2}$

Use manipulatives or diagrams to answer #4 and #5.

4. $\frac{2}{7} \div 4$

5. $\frac{1}{3} \div 12$

Mental Math

6. What is 150% of $20?

7. What is 0.3% of $2000?

8. What is 2.5% of $60 000?

9. Determine $\sqrt{81}$.

10. Determine 11^2.

Section 6.5

1. Express as a mixed number.

a) $\frac{18}{5}$ **b)** $\frac{23}{3}$

2. Express as an improper fraction.

a) $3\frac{3}{7}$ **b)** $1\frac{3}{11}$

Use a method of your choice for #3 to #5.

3. $1\frac{5}{7} \times 2\frac{1}{2}$

4. $\frac{2}{3} \times 3\frac{1}{4}$

5. $2\frac{1}{6} \times 4\frac{1}{3}$

Mental Math

6. Estimate $\sqrt{74}$. Show your thinking.

7. Estimate $\sqrt{114}$. Show your thinking.

8. Estimate $\sqrt{38}$. Show your thinking.

9. Determine 12^2.

10. Determine 13^2.

Section 6.6

Use a method of your choice for #1 to #5.

1. $\frac{2}{3} \div \frac{3}{4}$

2. $\frac{1}{5} \div 2$

3. $5 \div \frac{4}{9}$

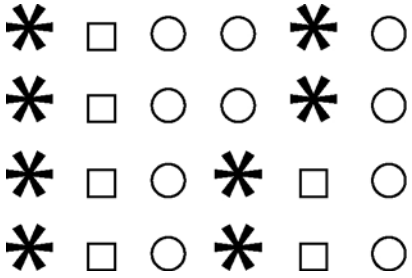
4. $1\frac{2}{11} \div \frac{4}{5}$

5. $3\frac{1}{2} \div 1\frac{2}{5}$

Mental Math

6. Cheese costs $7.98 for 2 kg. What is the unit rate?

Use this visual for #7 to #10.



7. What is the ratio of stars to circles to squares?

8. Express the ratio from #7 in lowest terms.

9. Express the ratio of stars to squares as a mixed number in lowest terms.

10. Express the ratio of squares to circles as a fraction in lowest terms.