

Chapter (5)

Understand and Use Ratio and Rate

5.1 Understand Ratios

5.4 Represent and Graph Ratios

5.5 Understand Rates and Unit Rates

(Use notebook, worksheets, class work)

Chapter (6)

Understand and Use Percent

6.1 Understand Percent

6.2 Relate Fraction. Decimals and Percent

6.5 Find the Percent of Number

(Use notebook, worksheets, class work)

Chapter (7)

Solve area. Surface area. And Volume Problem

7.1 Find Area of Parallelograms and Rhombuses

7.2 Solve Triangle Area Problems

7.3 Find areas of Trapezoids and kites

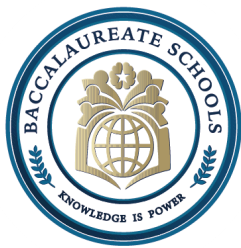
7.4 Find areas of polygons

7.6 Find Surface Areas of Prisms

7.7 Find Surface Areas of pyramids

7.8 Find Volume

(Use notebook, worksheets, class work)



Chapter (8)

Display. Describe and summarize Data

8.1 Recognize Statistical Questions

8.2 Summarize Data Using Mean, Median, and mode

8.3 Display Data Box Plots

8.4 Display Data in Frequency Tables and Histograms

(Use notebook, worksheets, class work)

Chapter (5)

Understand and Use Ratio and Rate

In 9–14, use the data to write a ratio for each comparison in three different ways.

A person's blood type is denoted with the letters A, B, and O, and the symbols + and –. The blood type A+ is read as *A positive*. The blood type B– is read as *B negative*.

9. O+ donors to A+ donors
90 to 45, 90:45, $\frac{90}{45}$
10. AB– donors to AB+ donors
4 to 6, 4:6, $\frac{4}{6}$

11. B+ donors to total donors
20 to 195, 20:195, $\frac{20}{195}$
12. O– donors to A– donors
9 to 21, 9:21, $\frac{9}{21}$

13. A+ and B+ donors to AB+ donors
65 to 6, 65:6, $\frac{65}{6}$
14. A– and B– donors to AB– donors
21 to 4, 21:4, $\frac{21}{4}$

15. Which comparison does the ratio $\frac{90}{9}$ represent?
O+ donors to O– donors
16. Which comparison does the ratio 20:21 represent?
B+ donors to A– donors

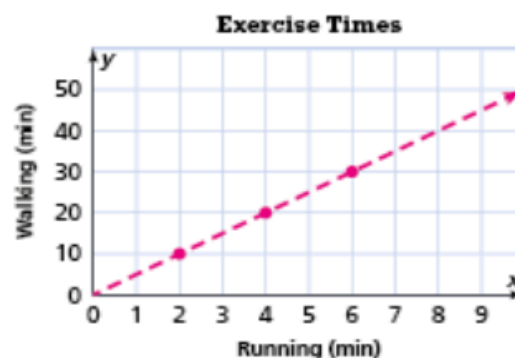
Blood Donors

Type	Donors
A+	45
B+	20
AB+	6
O+	90
A–	21
B–	0
AB–	4
O–	9
Total	195

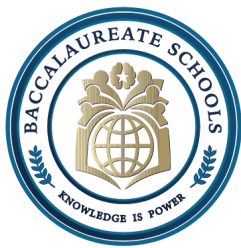
A student runs 2 minutes for every 10 minutes she walks.

- a. Complete the table. Graph the pairs of values.

Running (min)	Walking (min)
2	10
4	20
6	30



- b. For how long would the student walk if she runs for 7 minutes?
She would walk for 35 minutes.



Complete each table

17.

Beans	186	62	434	682
Bags	3	1	7	11

19.

Miles	25	75	125	300
Gallons	1	3	5	12

Chapter (6)

Understand and Use Percent

In 8–10, find the percent.

8. $\frac{1 \times 20}{5 \times 20} = \frac{20}{100} = 20\%$

9. $\frac{3 \times 10}{10 \times 10} = \frac{30}{100} = 30\%$

10. $\frac{11 \times 5}{20 \times 5} = \frac{55}{100} = 55\%$

In 5–7, write each number in equivalent forms using the two other forms of notation: fraction, decimal, or percent.

5. 27%
0.27, $\frac{27}{100}$

6. 0.91
91%, $\frac{91}{100}$

7. $\frac{6}{100}$
0.06, 6%

Leveled Practice In 12–17, find each part or percent.

12. What is 5% of 210?

$x = 0.05 \times 210$

$x = 10.5$

13. What is 8.2% of 500?

$x = 0.082 \times 500$

$x = 41$

14. What percent of 32 is 5.6?

$p \cdot 32 = 5.6$

$32p = 5.6$

$\frac{32p}{32} = \frac{5.6}{32}$

$p = 0.175 = 17.5\%$

15. What is 35% of 10?

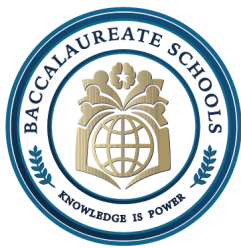
3.5

16. What percent of 75 is 33?

44%

17. What is 2.25% of 24?

0.54



Chapter (7)

Solve Area, Surface Area, Volume

Shape	Name	Formula for Area
	Square	Base x Height
	Rectangle	Base x Height
	Triangle	Base x Perpendicular Height ÷ 2
	Trapezium	$\frac{(a + b) \times \text{height}}{2}$
	Parallelogram	Base x Perpendicular Height
	Rhombus	Length x Height ÷ 2
	Kite	Length x Height ÷ 2

Chapter (8)

Display, Describe, and Summarize Data

Mean

Add all the numbers then divide by the amount of numbers

9, 3, 1, 8, 3, 6

$$9 + 3 + 1 + 8 + 3 + 6 = 30$$

$$30 \div 6 = 5$$

The mean is 5

Median

Order the set of numbers, the median is the middle number

9, 3, 1, 8, 3, 6

1, 3, 3, 6, 8, 9

The median is 4.5

Mode

The most common number

9, 3, 1, 8, 3, 6

The mode is 3

Range

The difference between the highest number and lowest number

9, 3, 1, 8, 3, 6

$$9 - 1 = 8$$

The range is 8