

UNIT 3: STATISTICS

PREREQUISITE SKILLS

Numeracy Skills

1. Order from least to greatest.

a) -1, 2, -3, 4, -5, 6, -7, 8

Answer = -7, -5, -3, -1, 2, 4, 6, 8

d) 3.2, 4.8, 1.2, 3.6, 3.07

Answer = 1.2, 3.07, 3.2, 3.6, 4.8

↑ ↑
3.07 3.20

2. Evaluate. Round to 2 dps.

3.9461 6.003 17.328

3.95 6.00 17.33

$\sqrt{234}$

$\frac{34}{7}$

$\sin 58$

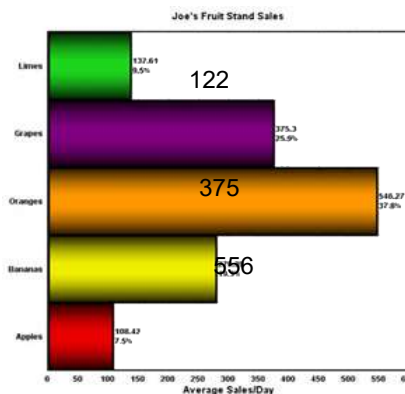
← use degrees

15.3 4.86 0.85

Interpreting Graphs

4. Fruit Sales

- limes
- grapes
- oranges
- bananas
- apples



a) What type of graph?

bar graph

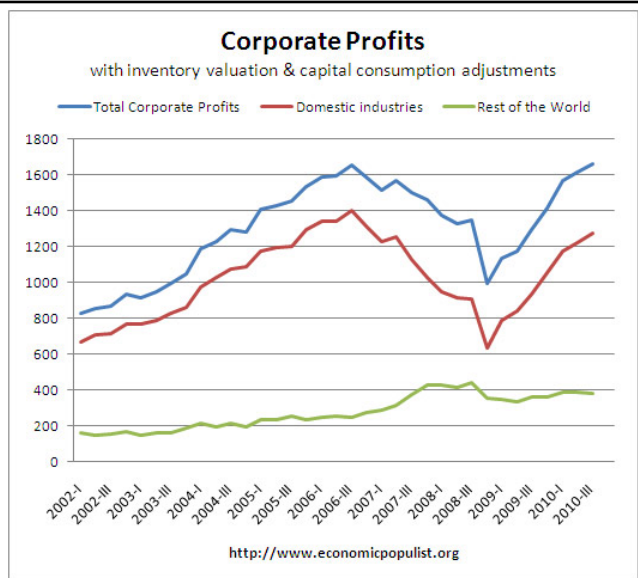
b) Most popular type of fruit?

oranges

c) What is the total sales for a day?

1446.99

5. Corporate Profits.



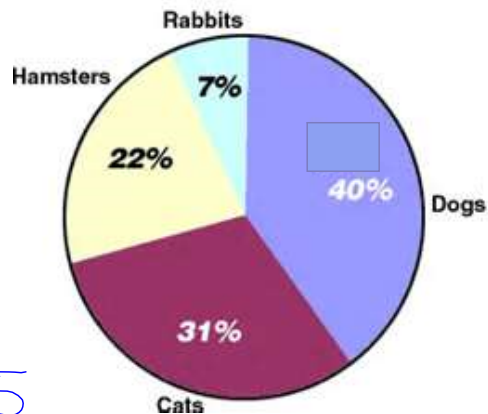
a) What type of graph?
broken-line graph

b) What do the different lines represent?

c) Why do you think the green line has a different shape?

6. In Ms. Green's class there are 25 students.

(1) **Four Most Popular Pets Among Students in Ms. Green's Fifth Grade Class**



a) How many like dogs?

10 $40\% \times 25 = 10$

b) What is the total percentage?

100

c) Is that realistic?

$0.07(25) = 1.75$

On the Boards...

1. Order the numbers in each set from least to greatest.

a) 5, 4, 11, 9, 15, 7, 8, 1, 5, 19, 4, 9

b) 3, 3, 5, 7, 1, 3, 5, 6, 9,
11, 12, 6, 4, 2, 2, 1

c) 5, 8, 1, -3, 0, 12, -11,
4, 5, 1, 7, -3, -5

d) $\frac{1}{2}$, $\frac{5}{8}$, $\frac{1}{4}$, $\frac{3}{16}$

2. Evaluate. Round your answer to two decimal places, if necessary.

a) $\frac{14 + 16 + 22 + 75 + 85 + 35}{6}$

b) $\frac{5 + 11 + 4 + 7 + 15 + 12 + 22 + 8}{8}$

3. Evaluate. Round your answer to two decimal places, if necessary.

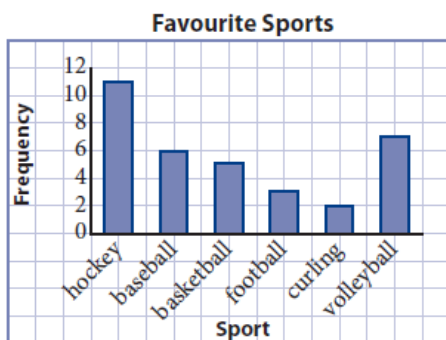
a) $\sqrt{121}$

b) $\sqrt{47}$

c) $\sqrt{3^2 + 4^2}$

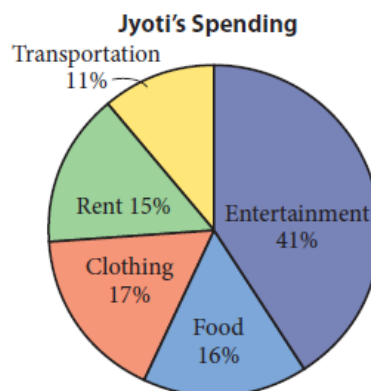
d) $\sqrt{1^2 + 2^2 + 3^2}$

4. The graph shows the favourite sports of students in Minh's physical education class.



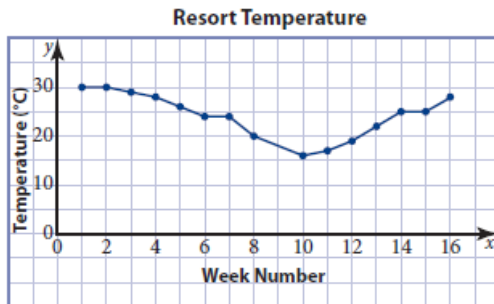
- Identify the type of graph.
- Which sport is the most popular?
- Which sport is the least popular?
- Does "least popular" mean the same as "not popular"? Explain.

5. The circle graph shows Jyoti's spending pattern over the last three months.



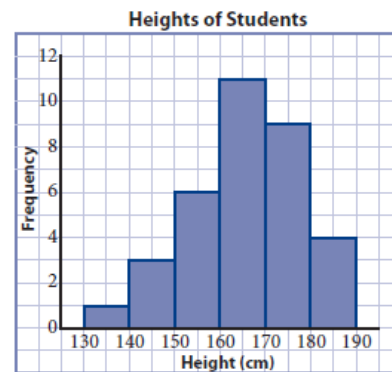
- What was Jyoti's greatest expense?
- If Jyoti earned \$1220 over the last three months, how much did she spend on clothing?

6. The graph shows the average weekly temperature at a Caribbean island resort for four months. The average for the ninth week is missing.



- Identify the type of graph.
- Estimate the average weekly temperature for the ninth week.
- The graph ends on the sixteenth week. Predict the average weekly temperature for the seventeenth week. Justify your answer.
- What information would you need to check your answer in part c)?

7. The graph shows the heights of the students in a club.



- Identify the type of graph.
- How many students are in the club?

Answers

Prerequisite Skills, pages 100–101

- 1, 4, 4, 5, 5, 7, 8, 9, 9, 11, 15, 19
 - 1, 1, 2, 2, 3, 3, 3, 4, 5, 5, 6, 6, 7, 9, 11, 12
 - −11, −5, −3, −3, 0, 1, 1, 4, 5, 5, 7, 8, 12
 - $\frac{3}{16}, \frac{1}{4}, \frac{1}{2}, \frac{5}{8}$
- 41.17
 - 10.5
 - 70.71
 - 59.6
 - 4.35
- 11
 - 6.86
 - 5
 - 3.74
- bar graph
 - hockey
 - curling
 - No, two people like curling, so it is popular among some people; answers may vary.
- entertainment
 - \$207.40
- scatter plot
 - about 18°C
 - about 30°C; answers may vary.
 - Whether the temperature continues to increase, decreases, or stays the same; answers may vary.
- histogram
 - 34

HOMEWORK

PG 100 # 1-7