

Compute the total elapsed time in the given problems.

1. From 8:15 P.M. to 11:30 P.M.

$$\begin{array}{r} 11:30 \\ - 8:15 \\ \hline 3:15 \end{array}$$

2. From 7:45 A.M. to 12:30 P.M. ⁹⁰

$$\begin{array}{r} 11:30 \\ - 7:45 \\ \hline 4:45 \end{array}$$

3. From 6:30 A.M. to 2:30 P.M. ¹⁴

$$\begin{array}{r} 12:30 \\ 6:30 \\ \hline 8:00 \end{array}$$

4. From 10:30 A.M. to 7:15 P.M. ¹⁸

$$\begin{array}{r} 7:15 \\ 10:30 \\ \hline 8:45 \end{array}$$

Simplify each of the given expressions below.

5. $3 + (-8)$

-5

6. $-7 - 9$

-16

7. $16 + (-6)$

10

8. $-4 - (-4)$

0

9. $-11 - 7$

-18

10. $-8 + (-5)$

-13

11. $-5 - (-6)$

1

12. $13 + (-3)$

10

13. $-7 + (-3)$

-10

14. $2 - (-12)$

10

Find the mean of each set of numbers.

15. 6, 15, 16, 20, 13, 5, 10, 16

$$\frac{101}{8} \approx 12.6$$

16. 48.2, 61.6, 39.5, 53.1

$$\frac{202.4}{4} = 50.6$$

Standard Units of Measure

Length

12 inches (in) = 1 foot (ft)

3 feet (ft) = 1 yard (yd)

5,280 feet (ft) = 1 mile (mi)

Volume

2 cups (c) = 1 pint (pt)

2 pints (pt) = 1 quart (qt)

4 quarts (qt) = 1 gallon (gal)

Weight

16 ounces (oz) = 1 pound (lb)

2,000 pounds (lb) = 1 ton (t)

Convert the following Standard units of measure (write all answers on given lines). [1 point each]

1. $4 \text{ yd} = \frac{12}{4(3)} \text{ ft}$

2. $24 \text{ ft} = \frac{8}{3} \text{ yd}$

3. $5 \text{ mi} = \frac{26,400}{5(5,280)} \text{ ft}$

4. $63,360 \text{ ft} = \frac{12}{5,280} \text{ mi}$

5. $5,280 \text{ yd} = \frac{3}{5,280(3)} = \frac{15,840}{5,280} \text{ mi}$

6. $7 \text{ mi} = \frac{12,320}{7(5,280)} \text{ yd}$

7. $516 \text{ in} = \frac{43}{12} \text{ ft}$

8. $71 \text{ ft} = \frac{852}{71(12)} \text{ in}$

9. $18 \text{ yd} = \frac{54}{18(3)} \text{ ft}$

10. $246 \text{ ft} = \frac{82}{3} \text{ yd}$

11. $15 \text{ yd} = \frac{1,524}{15(3)} = 45(12) \text{ in}$

12. $468 \text{ in} = \frac{13}{36(12(3))} \text{ yd}$

Metric Units of Measure

Length

- 1,000 millimeters (mm) = 1 meter (m)
- 100 centimeters (cm) = 1 meter (m)
- 1,000 meters (m) = 1 kilometer (km)
- 1,000 grams (G) = 1 kilogram (kg)

Volume

- 1,000 milliliters (mL) = 1 liter (L)

Mass

- 1,000 milligrams (mg) = 1 gram (g)

Convert the following Metric units of measure (write all answers on given lines). [1 point each]

13. $56.6 \text{ L} = \underline{56,600} \text{ ml}$ 14. $\frac{2,300 \text{ ml}}{1000} = \underline{2.3} \text{ L}$ 15. $76.52 \text{ L} = \underline{76,520} \text{ ml}$ 16. $67,903 \text{ ml} = \underline{67.903} \text{ L}$
17. $45.23 \text{ G} = \underline{45,230} \text{ mg}$ 18. $24,815 \text{ mg} = \underline{24.815} \text{ G}$ 19. $28.7 \text{ cm} = \underline{287} \text{ mm}$ 20. $975 \text{ mm} = \underline{97.5} \text{ cm}$
21. $7,325 \text{ cm} = \underline{73.25} \text{ m}$ 22. $32.56 \text{ m} = \underline{3,256} \text{ cm}$ 23. $48 \text{ km} = \underline{48,000} \text{ m}$ 24. $8,920 \text{ m} = \underline{8.920} \text{ km}$

Use the bar graph to answer questions 1 to 3.

1. Which appliance uses the most electricity for the month?

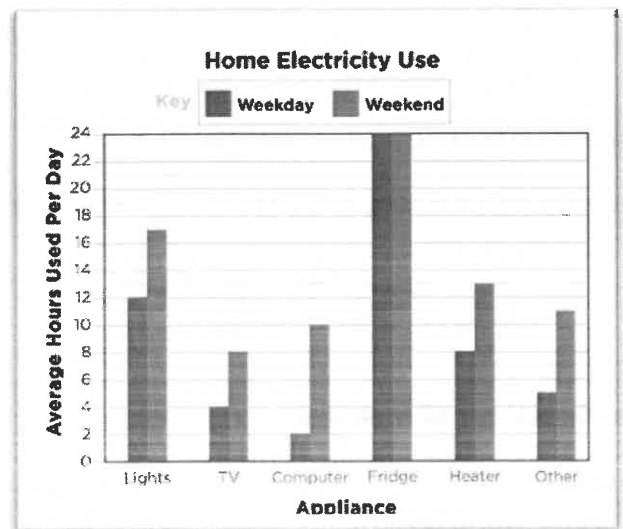
Fridge

2. Which appliance is used an average of 10 hours on the weekend?

Computer

3. Which appliance has the largest difference in use between the weekday and the weekend?

Computer



Use the circle graph to answer questions 4 to 7.

4. Which expense is the most per month?

Rent

5. Which expense is the least per month?

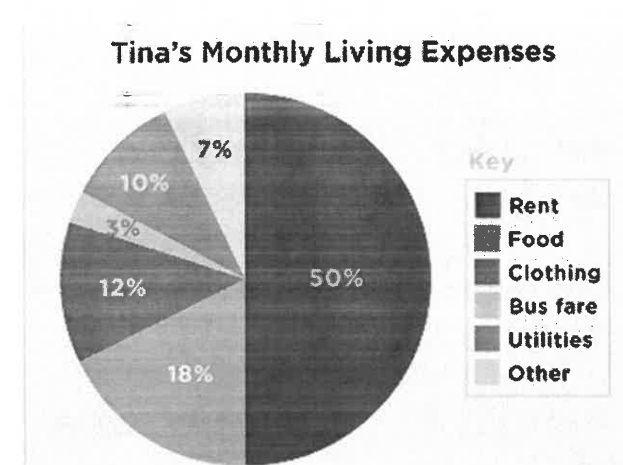
Bus Fare

6. Which expense is about 12% per month?

Clothing

7. Which two expenses add up to 30% per month?

Clothing and Food



Use the horizontal bar graph to answer questions 8 to 10.

8. Which year had the highest production of Deluxe?

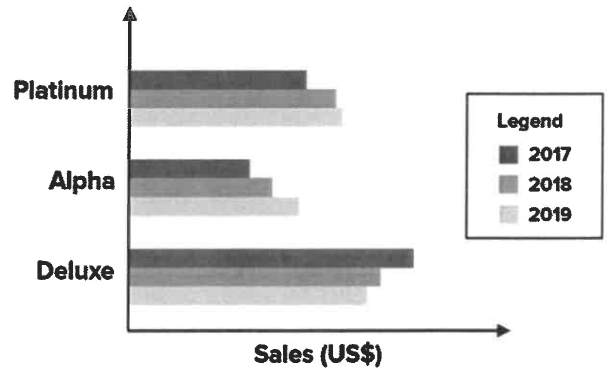
2017

9. Which year had the lowest production of Alpha?

2017

10. Which two years had the closest production of Platinum?

2018 and 2019



Use the line graph to answer questions 11 to 14.

11. Which month had the most gold sales in 2002?

March

12. What were the gold sales in May of this year?

\$ 200,000,000

13. What were the gold sales in December?

About \$ 195,000,000

14. Which two month had the least gold sales for the year?

July and August

