Name: _____ Date: _____

Placement Test for
Primary Mathematics 5B

1. What is the decimal represented by the ⓵ 0.1 0.01 0.001 ?   [1]

(A) 3.57   (B) 3.507

(C) 0.357   (D) 3.057

2. Express the fractions as decimals.   [4]

(a) $\dfrac{1}{2}$ = _____   (b) $4\dfrac{1}{4}$ = _____

(c) $15\dfrac{3}{5}$ = _____   (d) $6\dfrac{7}{8}$ = _____

3. Express the decimals as fractions in simplest form.   [4]

(a) 0.8 = _____   (b) 3.5 = _____

(c) 45.75 = _____   (d) 1.125 = _____

4. Fill in the blanks. [3]

   (a) 1 one = _____ tenths

   (b) 4 tenths = _____ hundredths

   (c) 8 hundredths = _____ thousandths

5. What is 16.03 + 3.56? [1]

   (A) 16.386   (B) 19.59   (C) 19.86   (D) 51.63

6. What is 6.89 − 1.34? [1]

   (A) 5.55   (B) 6.51   (C) 6.756   (D) 8.25

7. Multiply or divide. Show your work. [4]

   (a) 13.26 × 40 = _____   (b) 0.6 ÷ 5 = _____
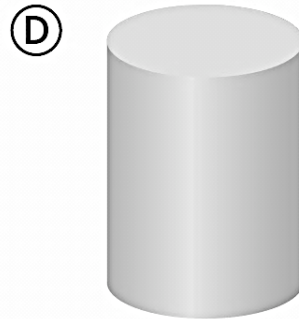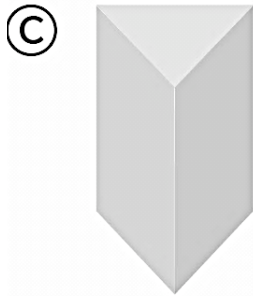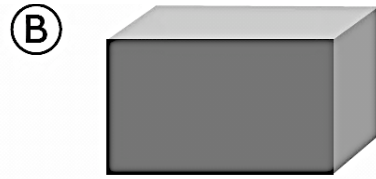
   (c) 4.2 × 5.35 = _____   (d) 38.2 ÷ 4 = _____

8. Fill in the blanks.   [3]

    (a)   1.5 km = _____ m

    (b)   3,015 mL = _____ L

    (c)   2.25 lb = _____ oz
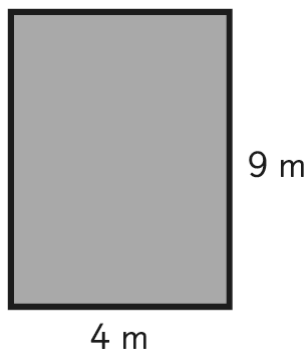

9. Which of the following solids is a rectangular prism?   [1]

    Ⓐ

    Ⓑ

    Ⓒ

    Ⓓ

10. Find the area.   [2]
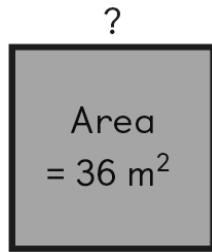
    (a)

    9 m

    4 m
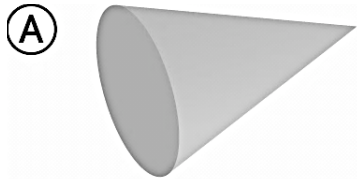
    Area = _____ m^2

(b)   The following figure is a square.

3 in.
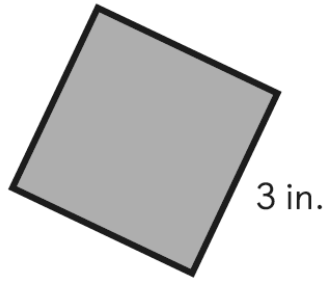
Area = _____ in^2

11.   Find the missing side length.   [2]

(a)   The following figure is a square.

?

Area
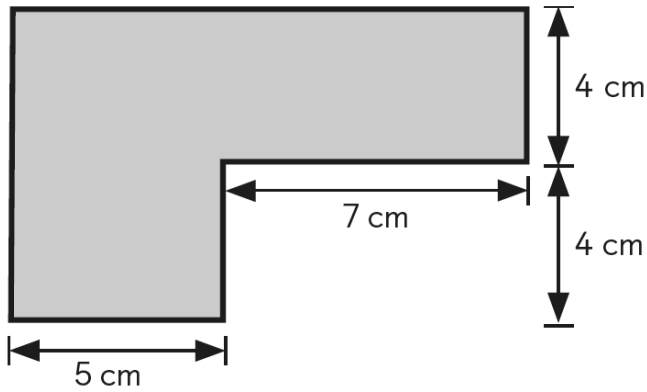= 36 m^2

Side length = _____ m

(b)

Area = 40 ft^2 ?

10 ft
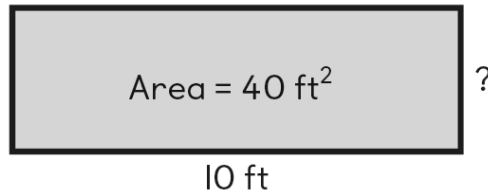
Width = _____ ft

12. The composite figure is made up of two rectangles.

    Find its area. [2]

13. Fill in the blanks. [2]

    (a) 10^2 = _____ × _____

    (b) 10^3 = _____ × _____ × _____

14. Multiply. [2]

    (a) 13 × 4 = _____   (b) 22 × 15 = _____

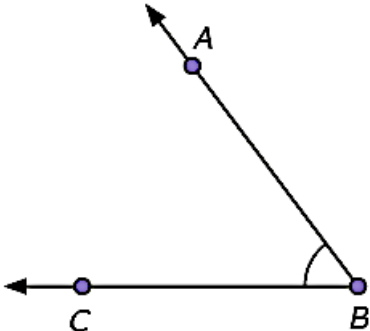15. Divide. [2]

    (a) 84 ÷ 4 = _____   (b) 135 ÷ 3 = _____

16. Identify the triangles and quadrilaterals. Then complete the table below with the letters of the shapes. [5]
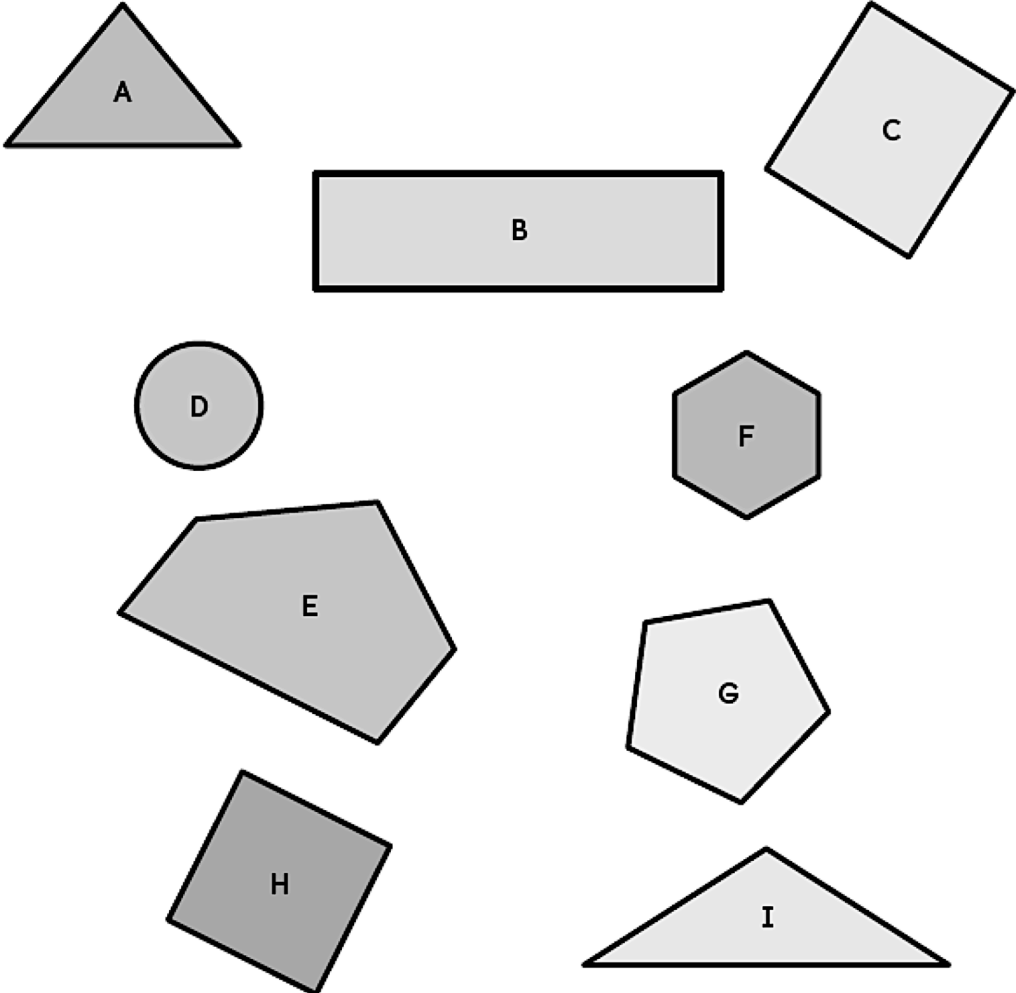
Triangles	Quadrilaterals

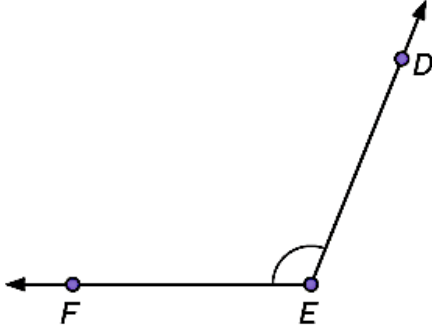17. Measure the marked angles using a protractor. Fill in the blanks.   [3]
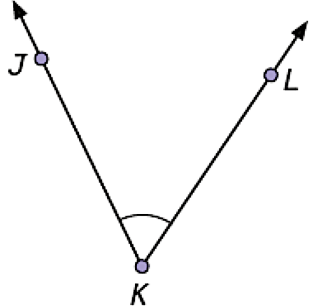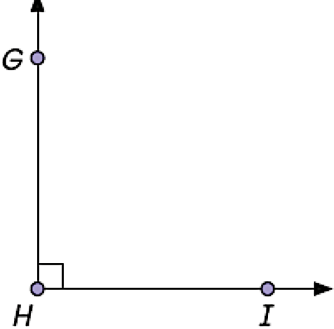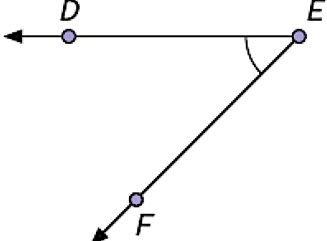
(a)

∠ABC = _____

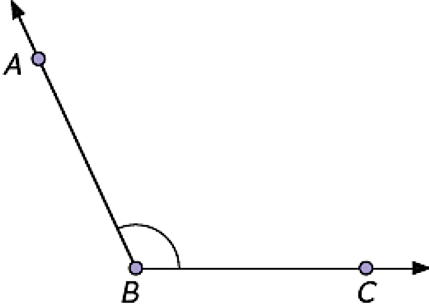∠ABC is an _____ angle.

(b)

∠DEF = _____

18. Classify each marked angle as a right angle, an acute angle, or an obtuse angle.   [4]

Right Angles	Acute Angles	Obtuse Angles

18. Identify the type of triangles. Write **right**, **acute**, or **obtuse**. [4]

(a)

_____
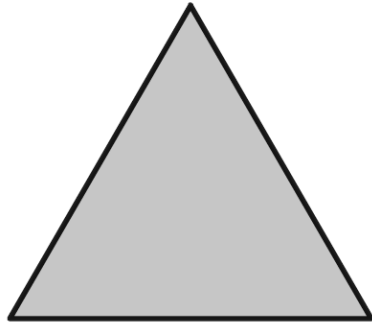
(b)

_____
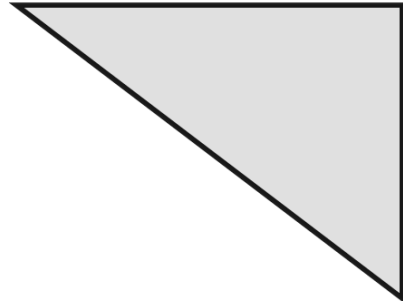
(c)

_____
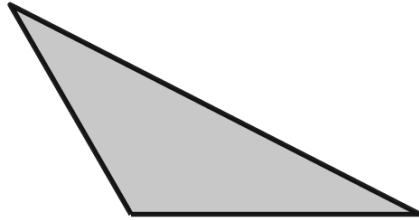
(d)

_____
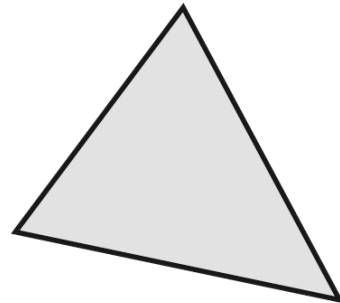
19. What is the sum of $\frac{3}{4}$ and $\frac{5}{8}$? Choose the **two** correct answers. [2]

(A) $\frac{8}{12}$ (B) $\frac{11}{8}$ (C) $1\frac{3}{8}$ (D) $1\frac{1}{2}$

20. Find the difference between $\frac{7}{9}$ and $\frac{5}{6}$. [1]

Ⓐ $1\frac{11}{18}$ Ⓑ $\frac{2}{3}$ Ⓒ $\frac{2}{9}$ Ⓓ $\frac{1}{18}$

21. Write the missing numbers. [2]

(a)

(b)

22. Multiply. [2]

(a) $\frac{7}{8} \times 4$ (b) $2\frac{3}{4} \times 6$

23. Divide. [2]

(a) $\frac{1}{8} \div 4$ (b) $1\frac{3}{4} \div 7$

24. The lengths of eight ribbons are shown below. [6]

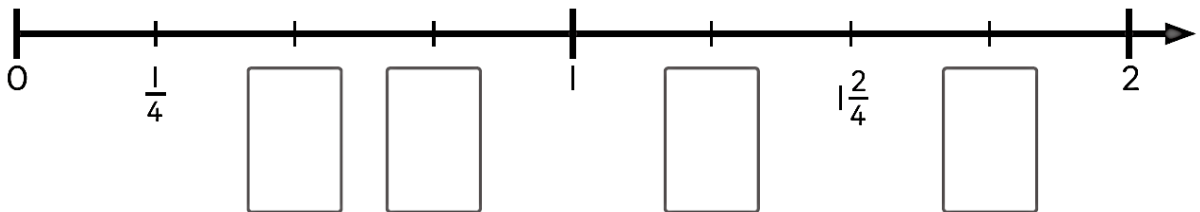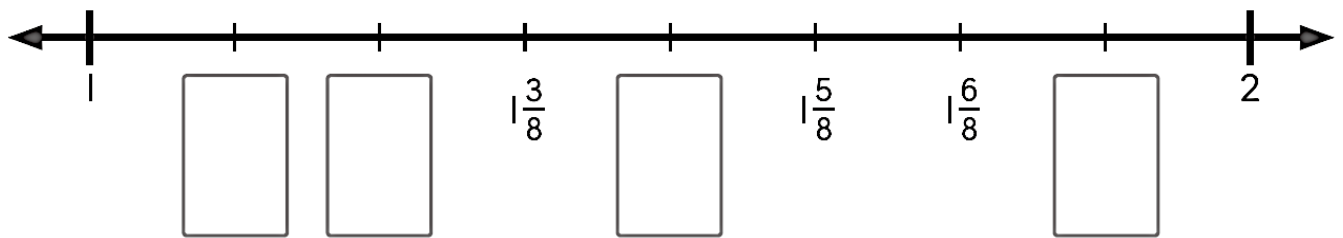| $3\frac{1}{4}$ in. | $4\frac{3}{4}$ in. | $3\frac{3}{4}$ in. | $3\frac{1}{4}$ in. | $4\frac{2}{4}$ in. | $4\frac{2}{4}$ in. | $4\frac{3}{4}$ in. | $4\frac{3}{4}$ in. |

(a) Complete the line plot to show the data.

Length of Ribbons
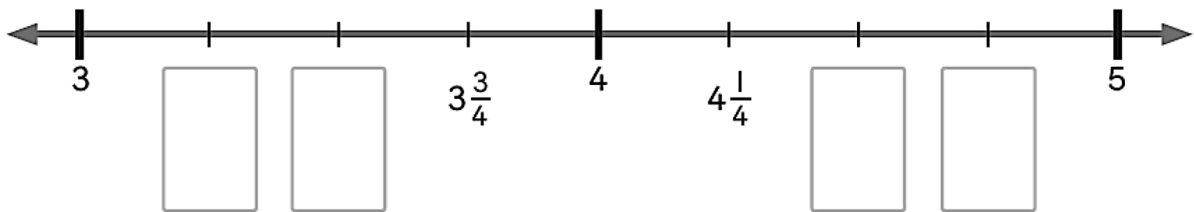
Length (inches)
Key: Each ✗ represents 1 ribbon.

Use the line plot to answer the questions.

(b) Only one piece of ribbon has a length of _____ inches.

(c) The longest ribbon has a length of _____ inches.

(d) The shortest ribbon has a length of _____ inches.

(e) There are as many _____-inch ribbons as

_____-inch ribbons.

(f) _____ ribbons have a length less than 4 inches.

25. The line plot below shows the results of a high jump competition.

The winner is the student who jumped the highest.

Use the data in the line plot to answer the question. [2]

High Jump Heights

Height (feet)
Key: Each ✗ represents 1 student.
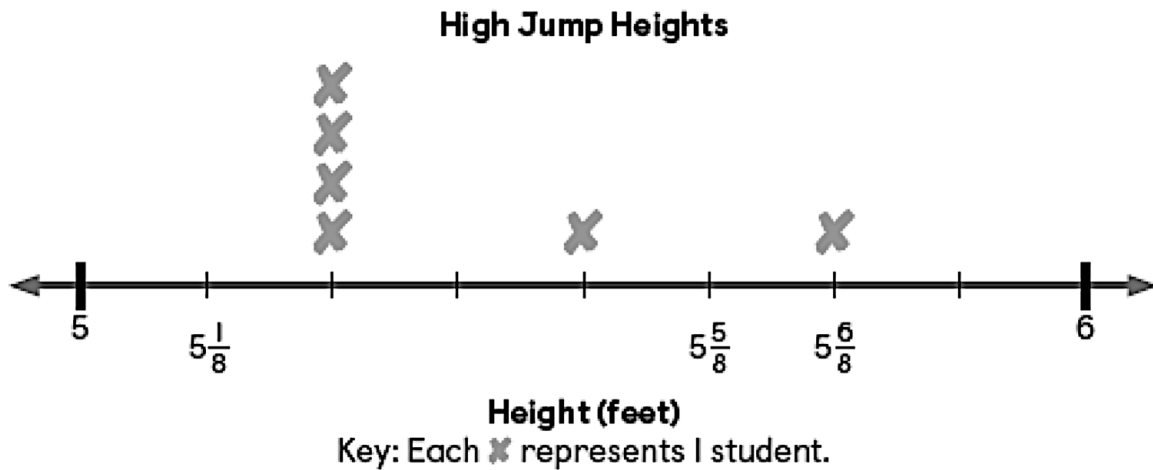
How many feet higher did the winner jump than the student in second place? Express your answer in simplest form.

26. Complete the patterns. Write the rules. [6]

(a) 40, 35, 30, 25, 20, 15, _____, _____

Rule: _____.

(b) 6, 12, 18, 24, 30, 36, _____, _____

Rule: _____.

27. Plot each of the following points on the coordinate plane.   [4]

    (a)   Point A (2, 4)

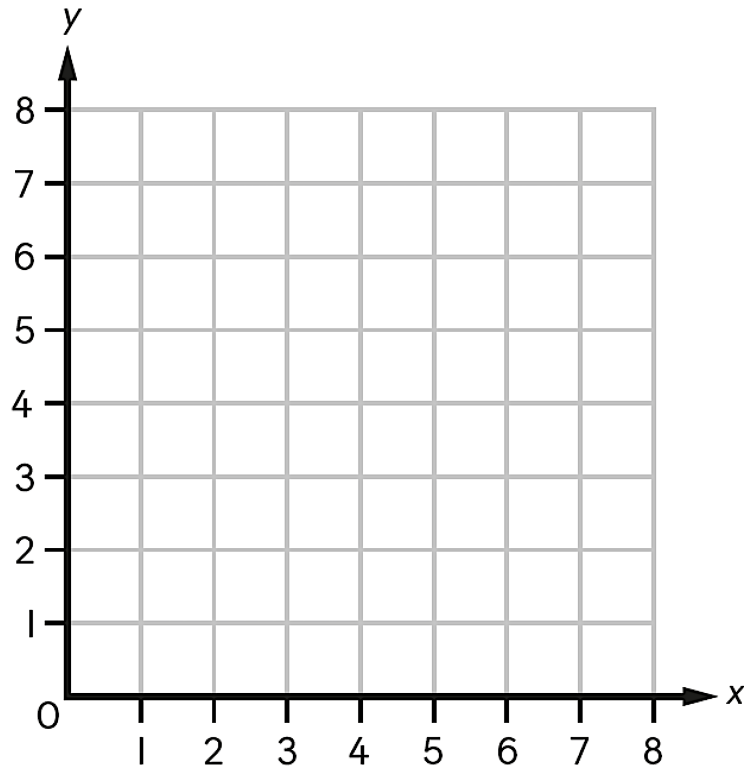   (b)   Point B (5, 2)

    (c)   Point C (0, 3)

    (d)   Point D (6, 7)

Answer Key

1.   B

2.   (a)   0.5   (b)   4.25

     (c)   15.6   (d)   6.875

3.   (a) $\frac{4}{5}$ (b) $3\frac{1}{2}$

     (c) $45\frac{3}{4}$ (d) $1\frac{1}{8}$

4.   (a)   10   (b)   40   (c)   80

5.   B

6.   A

7.   (a)   530.4

```
      1 3 . 2 6
  ×         4 0
  ─────────────
    5 3 0 . 4 0
```

     (b)   0.12

```
          0 . 1 2
      ┌──────────
    5 ) 0 . 6 0
          5
      ─────────
          1 0
          1 0
      ─────────
            0
```

     (c)   22.47

```
          5 3 5
  ×         4 2
  ─────────────
      1 0 7 0
    2 1 4 0 0
  ─────────────
    2 2 4 7 0
```

(d)   9.55

```
          9 . 5 5
    4 ) 3 8 . 2 0
        3 6
            2 2
            2 0
              2 0
              2 0
                0
```
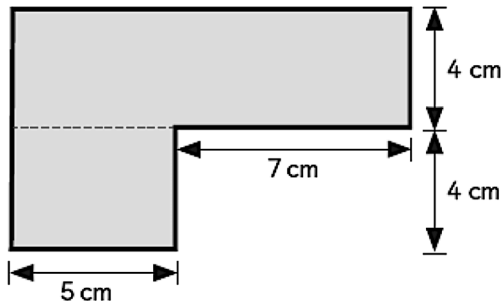
8.   (a)   1,500 (b)   3,015   (c)   36

9.   B

10.   (a)   36   (b)   9

11.   (a)   6   (b)   4

12.

Area of figure

= (5 + 7) × 4 + 5 × 4

= 12 × 4 + 20

= 48 + 20

= 68 cm^2

13.   (a)   10, 10

       (b)   10, 10, 10

14.   (a)   52

```
          1   3
      ×       4
          5   2
```

(b)　330

```
        2  2
    ×   1  5
    ─────────
    1  1  0
    2  2  0
    ─────────
    3  3  0
```

(c)　21

```
        2  1
    4 ) 8  4
        8
       ───
           4
           4
       ───
           0
```

(d)　45

```
           4  5
    3 ) 1  3  5
        1  2
       ──────
           1  5
           1  5
       ──────
              0
```

15.　Triangles: A, I

Quadrilaterals: B, C, H

16.　(a)　53°　(b)　112°

acute

17.　Right Angles: $\angle GHI$

Acute Angles: $\angle DEF$ and $\angle JKL$

Obtuse Angles: $\angle ABC$

18.　(a)　acute
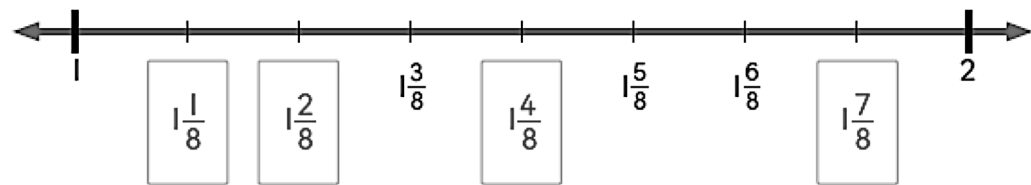
(b)　right

(c)　obtuse

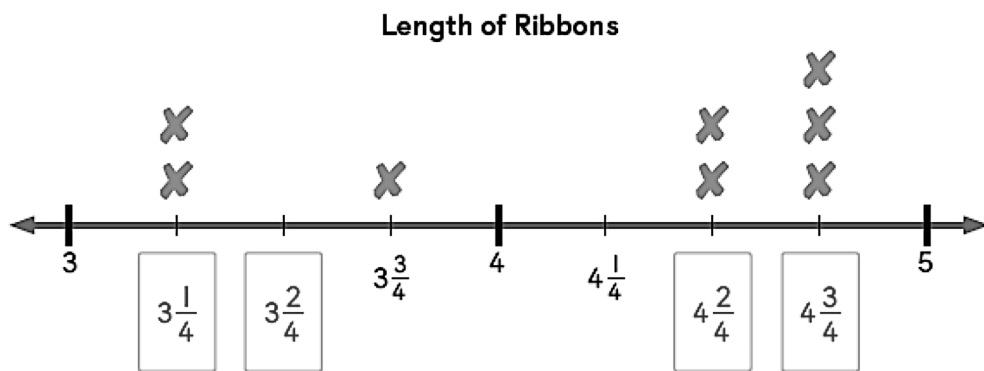(d)　acute

19. B and C

20. D

21. (a)

Number line from 0 to 2 with markings: $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{2}{4}$, $1\frac{3}{4}$

(b)

Number line from 1 to 2 with markings: $1\frac{1}{8}$, $1\frac{2}{8}$, $1\frac{3}{8}$, $1\frac{4}{8}$, $1\frac{5}{8}$, $1\frac{6}{8}$, $1\frac{7}{8}$
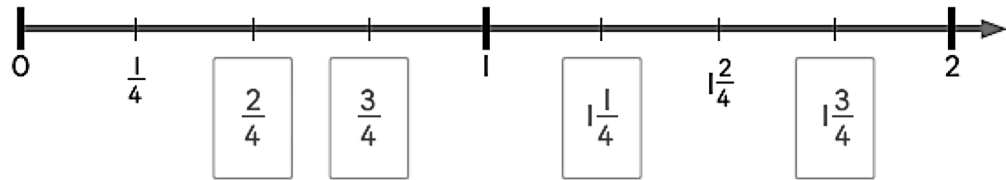
22. (a) $3\frac{1}{2}$ (b) $16\frac{1}{2}$

23. (a) $\frac{1}{32}$ (b) $\frac{1}{4}$

24. (a)

Length of Ribbons

Length (inches)
Key: Each ✗ represents 1 ribbon.

(b) $3\frac{3}{4}$ (c) $4\frac{3}{4}$

(d) $3\frac{1}{4}$ (e) $3\frac{1}{4}, 4\frac{2}{4}$

(f) 3

25. $5\dfrac{6}{8} - 5\dfrac{4}{8} = \dfrac{2}{8}$

$\qquad\qquad = \dfrac{1}{4}$

The winner jumped $\dfrac{1}{4}$ foot higher than the student in second place.

26. (a) 10, 5, Start at 40 and subtract 5

(b) 42, 48, Start at 6 and add 6

27.