

Q3 (Probability) Day 115 Name: _____

1. There are **twelve 2D shapes** in a **box**. In the box there are:

- 3 squares
- 6 circles
- 1 rectangle
- 2 pentagons

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a pentagon is $\frac{1}{2}$.
- The chance that the shape is a square is $\frac{1}{4}$.
- The chance that the shape is a rectangle is a zero.

2. There are **sixteen 2D shapes** in a **box**. In the box there are:

- 2 squares
- 1 circle
- 12 rectangles
- 1 pentagons

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a rectangle is $\frac{1}{2}$.
- The chance that the shape is a rectangle is $\frac{3}{4}$.
- The chance that the shape is **either** a pentagon **or** a circle is the same.

3. There are **twenty 2D shapes** in a **box**. In the box there are:

- 4 squares
- 3 circles
- 10 rectangles
- 3 pentagons

I choose a shape at random from the box. Look at the statements below. Tick each statement **true** or **false**.

True False

- The chance that the shape is a square is $\frac{1}{5}$.
- The chance that the shape is a rectangle is $\frac{1}{2}$.
- The chance that the shape is a circle is $\frac{1}{5}$.

4. There are **twenty four 2D shapes** in a **box**. In the box there are:

- 6 squares
- 3 circles
- 1 hexagon
- 12 pentagons
- 2 rectangles

I choose a shape at random from the box. Look at the statements below. Tick each statement **true** or **false**.

True False

- The chance that the shape is a square is $\frac{1}{2}$.
- The chance that the shape is a pentagon is even.
- The chance that the shape is a hexagon has the lowest probability.

5. There are **twenty four 2D shapes** in a **box**. In the box there are:

- 2 squares
- 1 circle
- 5 hexagons
- 4 pentagons
- 12 rectangles

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a pentagon is $\frac{1}{6}$.
- The chance that the shape is a hexagon is $\frac{1}{6}$.
- The chance that the shape is a rectangle is even.

6. There are **twenty four 2D shapes** in a **box**. In the box there are:

- 3 squares
- 6 circles
- 7 hexagons
- 4 pentagons
- 4 rectangles

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a square is $\frac{1}{8}$.
- The chance that the shape is a pentagon is $\frac{1}{8}$.
- The chance that the shape is **not** a circle is $\frac{3}{4}$.

7. There are **twenty eight 2D shapes** in a **box**. In the box there are:

- 3 squares
- 9 circles
- 7 hexagons
- 6 pentagons
- 2 rectangles
- 1 heptagon

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a circle is even.
- The chance that the shape is a hexagon is $\frac{1}{4}$.
- The chance that the shape is a pentagon is $\frac{1}{4}$.

8. There are **twenty eight 2D shapes** in a **box**. In the box there are:

- 2 squares
- 7 circles
- 14 hexagons
- 3 pentagons
- 1 rectangle
- 1 heptagon

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is **not** a circle is $\frac{3}{4}$.
- The chance that the shape is a hexagon is $\frac{1}{2}$.
- The chance that the shape is **either** a rectangle **or** a heptagon is the same.

9. There are **thirty two 2D shapes** in a **box**. In the box there are:

- 6 squares
- 2 circles
- 3 hexagons
- 4 pentagons
- 1 rectangle
- 16 heptagons

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a pentagon is $\frac{1}{8}$.
- The chance that the shape is a heptagon is $\frac{3}{4}$.
- The chance that the shape is a hexagon has the lowest probability.

10. There are **thirty two 2D shapes** in a **box**. In the box there are:

- 4 squares
- 12 circles
- 8 hexagons
- 2 pentagons
- 3 rectangles
- 3 heptagon

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is a hexagon is $\frac{1}{4}$.
- The chance that the shape is a pentagon is $\frac{1}{16}$.
- The chance that the shape is a square is $\frac{1}{16}$.

11. There are **forty eight 2D shapes** in a **box**. In the box there are:

- 12 squares
- 6 circles
- 3 hexagons
- 4 pentagons
- 10 rectangles
- 8 heptagons
- 5 octagons

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is **not** a square is $\frac{3}{4}$.
- The chance that the shape is a circle is $\frac{1}{8}$.
- The chance that the shape is a heptagon is $\frac{1}{8}$.

12. There are **forty eight 2D shapes** in a **box**. In the box there are:

- 4 squares
- 8 circles
- 3 hexagons
- 2 pentagons
- 1 rectangles
- 6 heptagons
- 24 octagons

I choose a shape at random from the box. Look at the statements below. Tick each statement **true or false**.

True False

- The chance that the shape is an octagon is even.
- The chance that the shape is a circle is $\frac{1}{6}$.
- The chance that the shape is a heptagon is $\frac{1}{6}$.

Answers

1. False, True, False
2. False, True, True
3. True, True, False
4. False, True, True
5. True, False, True
6. True, False, True
7. False, True, False
8. True, True, True
9. True, False, False
10. True, True, False
11. True, True, False
12. True, True, False