

Q4 (Probability) Day 52 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 cricle 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**