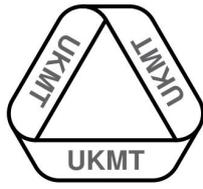


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1. What is the value of $1 - 0.2 + 0.03 - 0.004$?

A 0.826

B 0.834

C 0.926

D 1.226

E 1.234

2. Last year, Australian Suzy Walsham won the annual women's race up the 1576 steps of the Empire State Building in New York for a record fifth time. Her winning time was 11 minutes 57 seconds.

Approximately how many steps did she climb per minute?

A 13

B 20

C 80

D 100

E 130

3. What is a half of a third, plus a third of a quarter, plus a quarter of a fifth?

A $\frac{1}{1440}$

B $\frac{3}{38}$

C $\frac{1}{30}$

D $\frac{1}{3}$

E $\frac{3}{10}$

4. The diagram shows a regular pentagon inside a square.

What is the value of x ?

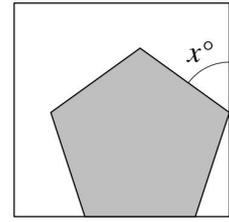
A 48

B 51

C 54

D 60

E 72



5. Which of the following numbers is not a square?

A 1^6

B 2^5

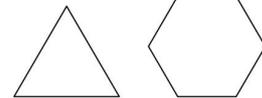
C 3^4

D 4^3

E 5^2

6. The equilateral triangle and regular hexagon shown have perimeters of the same length.

What is the ratio of the area of the triangle to the area of the hexagon?



A $5:6$

B $4:5$

C $3:4$

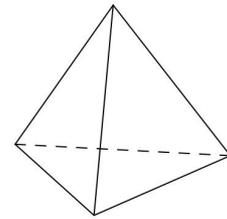
D $2:3$

E $1:1$

7. A tetrahedron is a solid figure which has four faces, all of which are triangles.

What is the product of the number of edges and the number of vertices of the tetrahedron?

- A 8 B 10 C 12 D 18 E 24



Final: we observe that $4 \times 6 = 24$.

8. How many two-digit squares differ by 1 from a multiple of 10?

- A 1 B 2 C 3 D 4 E 5

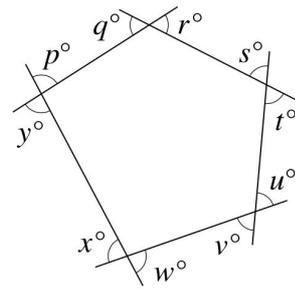
9. What is the value of $p + q + r + s + t + u + v + w + x + y$ in the diagram?

A 540
E 1440

B 720

C 900

D 1080



10. What is the remainder when $2^2 \times 3^3 \times 5^5 \times 7^7$ is divided by 8?

A 2

B 3

C 4

D 5

E 7

11. Three different positive integers have a mean of 7.

What is the largest positive integer that could be one of them?

A 15

B 16

C 17

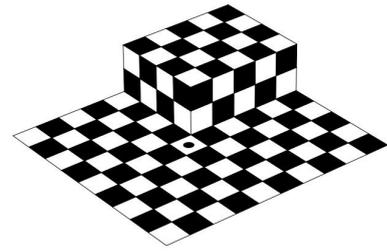
D 18

E 19

12. An ant is on the square marked with a black dot. The ant moves across an edge from one square to an adjacent square four times and then stops.

How many of the possible finishing squares are black?

- A 0 B 2 C 4 D 6 E 8



13. What is the area of the shaded region in the rectangle?

- A 21 cm^2 B 22 cm^2 C 23 cm^2
D 24 cm^2 E more information needed

