2. If n is even, which of the following cannot be odd?

I $n + 3$
II $3n$
III $n^2 - 1$

A. I only
B. II only
C. III only
D. I and II only
E. I, II and III

HON ALG 2 BELLWORK
TUESDAY DEC 13, 2016

4. A certain animal in the zoo has consumed 39 pounds of food six days. If it continues to eat at the same rate, in how many mo days will its total consumption be 91 pounds?

A. 12
B. 11
C. 10
D. 9
E. 8

6. What is the length of the line segment in the x-y plane with end points at (-2,-2) and (2,3)?

A. 3
B. $\sqrt{31}$
C. $\sqrt{41}$
D. 7
E. 9

7. n is an integer chosen at random from the set

{5, 7, 9, 11 }

p is chosen at random from the set
{2, 6, 10, 14, 18}

What is the probability that $n + p = 23$?

A. 0.1
B. 0.2
C. 0.25
D. 0.3
E. 0.4

2. If n is even, which of the following cannot be odd?

I $n + 3$ — any even + an odd = odd

II $3n$ → any even × any integer = even

III $n^2 - 1$ — n^2 is even & one less than any even is an odd

A. I only
B. II only
C. III only
D. I and II only
E. I, II and III

HON ALG 2 BELLWORK TUESDAY DEC 13, 2016

4. A certain animal in the zoo has consumed 39 pounds of food six days. If it continues to eat at the same rate, in how many mo days will its total consumption be 91 pounds?

A. 12
B. 11
C. 10
D. 9
E. 8

$39 \div 6 = 6.5$ lbs/day

$91 - 39 =$ 52 more lbs

$52 \div 6.5 = 8$ more days

6. What is the length of the line segment in the x-y plane with end points at (-2,-2) and (2,3)?

A. 3
B. $\sqrt{31}$
C. $\sqrt{41}$
D. 7
E. 9

use distance formula:

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$
$$= \sqrt{(2 - -2)^2 + (3 - -2)^2}$$
$$= \sqrt{4^2 + 5^2}$$
$$= \sqrt{16 + 25} = \sqrt{41}$$

-or- plot points, connect them, then create a Rt Δ. Finally, use pythagorean theorem.

7. n is an integer chosen at random from the set

{5, 7, 9, 11 }

p is chosen at random from the set
{2, 6, 10, 14, 18}

What is the probability that n + p = 23 ?

A. 0.1
B. 0.2
C. 0.25
D. 0.3
E. 0.4

5+18 & 9+14 are the only ways $n+p=23$

$$\text{prob} = \frac{\text{favorable outcomes}}{\text{Total \# outcomes}}$$

TOTAL # outcomes for picking one # from each set = $4 \cdot 5 = 20$

$$P(\text{sum } 23) = \frac{2}{20} = .1 \text{ or } 10\%$$