Monday

An airplane takes off and climbs at a constant rate. After traveling 800 yards horizontally, the plane has climbed 285 yards vertically. What is the plane's angle of elevation during the takeoff and initial climb?

A 15.6°

B 18.4°

C 19.6°

D 22.3°

Tuesday

Suppose a Ferris wheel has a diameter of 68 feet. The wheel rotates 12° each time a new passenger is picked up. How far would you travel when the wheel rotates 12°? Round to the nearest tenth if necessary.

A 7.1 ft

C 7.8 ft

B 7.5 ft

D 14.2 ft

Wednesday

What is the remainder when $x^3 - 7x + 5$ is divided by x + 3?

F −11

G-1

H 1

J 11

Thursday

The graph of which of the following equations is symmetrical about the *y*-axis?

A
$$y = x^2 + 3x - 1$$
 C $y = 6x^2 + 9$

C
$$y = 6x^2 + 9$$

$$\mathbf{B} \quad y = -x^2 + x$$

B
$$y = -x^2 + x$$
 D $y = 3x^2 - 3x + 1$

Friday

The speed a tsunami, or tidal wave, can travel is modeled by the equation $s = 356\sqrt{d}$, where s is the speed in kilometers per hour and d is the average depth of the water in kilometers. A tsunami is found to be traveling at 145 kilometers per hour. What is the average depth of the water? Round to the nearest hundredth.