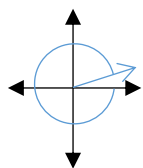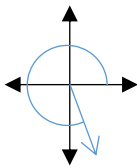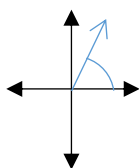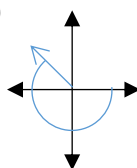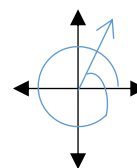4.2 Angles Only

Estimate each angle below.

1)

2)

3)

4)

5)

For 7-10, identify all angles that are coterminal with each angle. Then, find one positive and one negative angle that are coterminal with each angle.

7) 75°

8) -251°

9) $\dfrac{11\pi}{6}$

10) $-\dfrac{2\pi}{3}$

For 11-14, convert from radians to degrees or degrees to radians respectfully. When applicable leave in terms of π.
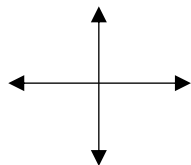
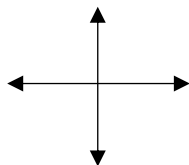11) $\dfrac{11\pi}{30}$

12) $\dfrac{13\pi}{10}$

13) 291°

14) -197°

For 15-18, draw each angle. Then, if each angle is in standard position, determine a coterminal angle that is between 0° and 360°. Finally, state the quadrant in which the terminal sides lies.
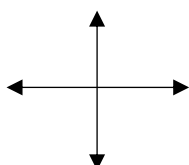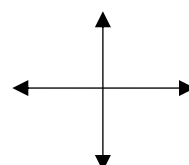
15) 422°

16) 840°

17) -724°

18) -290°

For 19-24, find the measure of each reference angle.

19) 301°

20) 132°

21) 623°

22)-490°

23) $\dfrac{7\pi}{4}$

24) $-\dfrac{4\pi}{3}$