1. Given angle θ, where $0°\leq\theta\leq360°$, determine two possible values of θ where each ratio would be true. Sketch both principal angles.

(a) $\cos\theta=0.6951$ (b) $\tan\theta=-0.7571$ (c) $\sin\theta=0.3154$

(d) $\cos\theta=-0.2882$ (e) $\sin\theta=-0.7503$ (f) $\tan\theta=1.3211$

2. For $\cos\theta=-\dfrac{5}{12}$, where $0°\leq\theta\leq360°$

   (a) In which quadrant(s) could the terminal arm of θ be located?
   (b) Draw a diagram for each possible terminal arm, and determine x, y, and r for each diagram.
   (c) Determine the trigonometric ratios for θ (exact values only) for each terminal arm.
   (d) Determine all possible values of θ to the nearest degree.

3. For $\tan\theta=\dfrac{15}{9}$, where $0°\leq\theta\leq360°$

   (a) In which quadrant(s) could the terminal arm of θ be located?
   (b) Draw a diagram for each possible terminal arm, and determine x, y, and r for each diagram.
   (c) Determine the trigonometric ratios for θ (exact values only) for each terminal arm.
   (d) Determine all possible values of θ to the nearest degree.

4. For $\sin\theta=-\dfrac{11}{20}$, where $0°\leq\theta\leq360°$

   (a) In which quadrant(s) could the terminal arm of θ be located?
   (b) Draw a diagram for each possible terminal arm, and determine x, y, and r for each diagram.
   (c) Determine the trigonometric ratios for θ (exact values only) for each terminal arm.
   (d) Determine all possible values of θ to the nearest degree.

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