Right Triangle Trig

Based on the given trig ratio, sketch a triangle and find the missing side as well as the other missing trig ratios. Angles A and B are the two non-right angles in a right triangle.

1. a) sin(A) = _____ b) sin(B) = _____

   c) cos(A) = _____ d) cos(B) = _____

   e) tan(A) = **3/4** f) tan(B) = _____

2. a) sin(A) = _____ b) sin(B) = **8/17**

   c) cos(A) = _____ d) cos(B) = _____

   e) tan(A) = _____ f) tan(B) = _____

3. a) sin(A) = _____ b) sin(B) = _____

   c) cos(A) = **12/13** d) cos(B) = _____

   e) tan(A) = _____ f) tan(B) = _____

4. a) sin(A) = _____ b) sin(B) = $\mathbf{1}/\sqrt{\mathbf{2}}$

   c) cos(A) = _____ d) cos(B) = _____

   e) tan(A) = _____ f) tan(B) = _____

Write each of the quadratic functions in factored form and then determine both the x-intercepts as well as the y-intercept.

11. $f(x) = x^2 + 9x + 20$

a. Factored form:

b. x-intercepts:

c. y-intercept:

12. $g(x) = x^2 + 2x - 15$

a. Factored form:

b. x-intercepts:

c. y-intercept:

13. $h(x) = x^2 - 49$

a. Factored form:

b. x-intercepts:

c. y-intercept:

14. $r(x) = x^2 - 13x + 30$

a. Factored form:

b. x-intercepts:

c. y-intercept:

15. $f(x) = x^2 + 20x + 100$

a. Factored form:

b. x-intercepts:

c. y-intercept:

16. $g(x) = x^2 - 8x - 48$

a. Factored form:

b. x-intercepts:

c. y-intercept:

17. $h(x) = x^2 + 16x + 64$

a. Factored form:

b. x-intercepts:

c. y-intercept:

18. $k(x) = x^2 - 36$

a. Factored form:

b. x-intercepts:

c. y-intercept:

19. $p(x) = x^2 - 2x - 24$

a. Factored form:

b. x-intercepts:

c. y-intercept: