9. Factor the following.

a) $3x^2 - 18x^3 + 9x$

b) $21mn^3 + 7m^2n^2 - 14mn^4$

c) $x^2 - 36$

d) $9x^2 - 16$
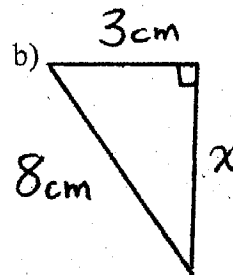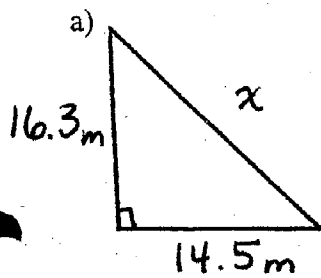
e) $25 - p^2$

f) $x^2 - 6x - 16$

g) $x^2 - 5x + 6$

h) $m^2 - m - 30$

10. Solve for the unknown side using the Pythagorean Theorem.

a)

16.3m, x, 14.5m

b)

3cm, 8cm, x

11. State which triangles are similar and prove your claim. Then use the properties of similar triangles to determine the unknown values.

a)

A, 15, D, 7.5m, E, x, B, 10m, C