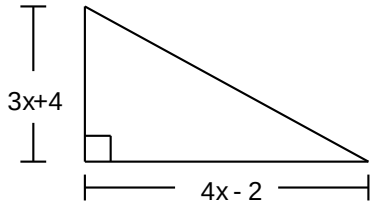
EXAM REVIEW 2

CHAPTER 2: The Algebra of Quadratic Expressions

1. Write a simplified expression to represent the area of the triangle.



2. Factor fully**.**

(a) $-2x^2+8x-10$ (b) $x^2-4x-32$ (c) $63m^2-7n^2$
(d) $16a^2-24ab+9b^2$ (e) $21x^2-13xy+2y^2$ (f) $-2x^2+7x+15$

3. Identify the following as a monomial, binomial, or trinomial.
(a) x^2-2x (b) $(x-2)(x+1)$ (c) $3x^2-x-2$ (d) $x^2(x+1)-2x(x+1)+7$

4. Factor each using the product of prime numbers.
(a) 304 (b) 9200

5. What are ALL possible integer values, k, such that $x^2+kx-32$ can be factored?

6. Factor fully.

(a) $3(b^2-4)+a^2(b^2-4)$ (b) $18(2-x)+x^2(x-2)+3x(x-2)$

7. Expand and simplify.

(a) $3(x^2-2)-4x(3x-7)$ (b) $-(a-3)^2+3(5a+2)^2$

8. Name an integer, k, such that the quadratic $6x^2-22x+k$ can be factored.

9. Find the GCF for each of the following polynomials.

(a) $12a^3b^3-6a^4b^2+9a^5b^4$ (b) $5x^2(x+y)-20y^2(-x-y)$

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