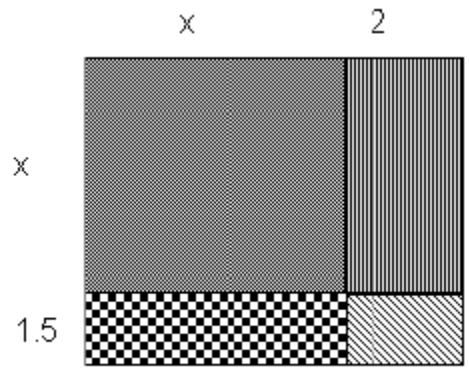
2016 Mathematics Standards of Learning
Algebra Readiness Formative Assessment

1A.2abc

1. Write a polynomial product which shows the area of the original rectangle before being divided into 4 smaller rectangles. Then simplify the polynomial product.



2. Given $2x^2+5x-12$ and $2x-3$, find the sum, difference, product and quotient of these polynomials.

3. If $x \neq 0, y \neq 0$, and $z \neq 0$, then

$$\frac{36x^6y^5z^{-2}}{12x^{-2}y^5z^2} =$$

A. $3x^4$
B. $\frac{3x^8}{z^4}$
C. $3x^4z^{-4}$
D. $3x^8y^{10}z^4$

4. $(2a^2b^3-10ab+b^2)-(-3a^2b^3-20ab-17b^2)$ is equivalent to –
A. $-a^2b^3-30ab-16b^2$
B. $a^2b^3+30ab+16b^2$
C. $5a^2b^3-10ab-18b^2$
D. $5a^2b^3+10ab+18b^2$

5. Which of the following is NOT a factor of $4x^2 + 20x + 24$?
   A. 4
   B. $x + 6$
   C. $x + 3$
   D. $x + 2$

6. Factor the expression $8x^2 - 18$
   A. $(2x + 9)(4x - 2)$
   B. $(8x - 9)(x + 2)$
   C. $2(2x + 3)(2x - 3)$
   D. $2(x - 9)(4x + 1)$