1. Determine the LCM and GCF: A) 32 and 44
B) 20 and 45
C) 12,20 and 36
2. Evaluate without calculator: A) $\sqrt{1936}$
B) $\sqrt[3]{1728}$
C) $\sqrt[4]{1296}$
3. The line $A$ bus arrives at the bus stop every 25 minutes, and the Line $B$ bus arrives every 15 minutes. They are both at the bus stop right now. In how many minutes will they both be at the bus stop again?
4. Julia is completing an art project. She has two pieces of construction paper. The first piece is 32 inches wide and the second piece is 56 inches wide. She wants to cut the paper into strips that are equal in width and as wide as possible. How wide should Julia cut each strip?
5. Multiply and simplify: A) $3 x(x-1)-5\left(x^{2}+2 x-1\right)$
B) $(2 x-1)(3 x+5)$
C) $(2 x+1)(3 x-5 y+2)$
D) $(2 x-3 y-z)(5 x+y-3 z)$
6. A) GCF: 4, LCM: 352
B) GCF: 5, LCM: 180
C) GCF: 4, LCM: 180
$\begin{array}{lll}\text { 2. A) } 44 & \text { B) } 12 & \text { C) } 6\end{array}$
7. 75 minutes
8. 8 inches
9. A) $-2 x^{2}-13 x+5 \quad$ B) $6 x^{2}+7 x-5 \quad$ C) $6 x^{2}-10 x y+7 x-5 y+2$
D) $10 x^{2}-13 x y-11 x z-3 y^{2}+8 y z+3 z^{2}$
