1. $\boxed{\text{E}}$
2. $\boxed{\text{C}}$
3. $\boxed{\text{B}}$
4. The integers must be $1 \times 0 \times -1 = 0$, which means that the least of the integers is -1. $\boxed{\text{D}}$
5. $\boxed{\text{D}}$
6. $\boxed{\text{C}}$
7. We know two side lengths of the parallelogram ($4\sqrt{2}$). Now we must find the length of the other two sides, which must be equal. We know that in a right-isoceles triangle (or a 45-45-90 triangle) that the hypoteneuse is $\sqrt{2}$ as long as the leg. Thus the missing side length is $4\sqrt{2} \times \sqrt{2} = 4 \times 2 = 8$. So the perimeter is $8 + 4\sqrt{2} + 8 + 4\sqrt{2} = \boxed{16 + 8\sqrt{2}}$
8. $\boxed{\text{B}}$
9. $\boxed{\text{A}}$
10. We know that the shape of the graph is a regular parabola only flipped upside down and moved up from the origin. Thus k is the y-intercept. The area of the triangle is 64. The formula for area of a triangle is $\frac{1}{2}bh$, where b is the base and h is the height. The height is k, so we write $64 = \frac{1}{2}bk \Rightarrow 128 = bk$. Now let's consider b. The length of b is determined by where the graph hits the x-axis. At these points, $y = k - x^2 = 0 \Rightarrow k = x^2 \Rightarrow x = \sqrt{k}$. Thus the length of b is $2\sqrt{k}$. Substitute this into our equation: $128 = bk \Rightarrow 128 = (2\sqrt{k})k \Rightarrow 64 = k\sqrt{k} = k \times k^{1/2} = k^{3/2}$. Now we raise each side to 2/3: $64^{2/3} = (k^{3/2})^{2/3} \Rightarrow k = (2^6)^{2/3} = 2^{6\times 2/3} = 2^4 = \boxed{16}$.

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