1. $\boxed{A}$. At constant speed, no acceleration needed. Therefore, no force.
2. $\boxed{B}$. $a = (20-5)/3 = 5$ m/s$^2$.
3. $\boxed{E}$. $a = \frac{2x}{t^2} = \frac{2\times 4}{2^2} = 2$ m/s$^2$.
4. $\boxed{B}$.
5. $\boxed{A}$. Think of $F$ as pulling both objects. $F = (m_1 + m_2)a = 6 \times 12 = 72$ N
6. $\boxed{B}$. $T_A = ma = (4)(12) = 48$ N.
7. $\boxed{C}$. $\sum F = ma = (2)(12) = 24$ N.
8. $\boxed{C}$. First, we calculate the acceleration. We also need to convert the weight of the rocket to its mass by dividing it by the gravity.

$$a = \frac{F}{m} = \frac{2.4}{1.5/10} = 16 \text{ m/s}^2.$$

We can then use the $a, v$, and $v_0$ to find the time:

$$v = v_0 + at, \text{ which means } t = \frac{v - v_0}{a} = \frac{36-12}{16} = \boxed{1.5 \text{ s}}.$$

9. $\boxed{D}$. Once the package is released, it is in free falling and its acceleration is the gravity.
10. $\boxed{B}$. Let the normal force on the student be $N$, we have

$$W - N = ma \text{ or } N = m(g-a) = (50)(9) = \boxed{450 \text{ N}}.$$

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