Given:

$m = 12 \text{ kg}$

$g = 9.8 \ \frac{m}{s^2}$

$\alpha = 30°$

$F_{friction} = 11 \text{ N}$

$a = 1.4 \ \frac{m}{s^2}$

$F_{applied} - ?$

We have the equations of horizontal forces:

$$m \cdot g \cdot \sin\alpha - F_{friction} - F_{applied} = m \cdot a \Rightarrow$$

$$\Rightarrow F_{applied} = m \cdot g \cdot \sin\alpha - F_{friction} - m \cdot a$$

$$F_{applied} = 12 \cdot 9.8 \cdot \sin 30° - 11 - 12 \cdot 1.4 = 58.8 - 11 - 16.8 = 31 \text{ N}.$$

So, the applied force is 31 N and its direction is the same as direction of the friction force (in the opposite direction of the motion).

Answer: 31 N.