Answer on Question #37671 – Math - Other

To find it use put-call parity:

$$C(t) - P(t) = S(t) - K \cdot e^{-rt},$$

where

$C(t)$ is the value of the call at time t,

$P(t)$ is the value of the put,

$S(t)$ is the current price of the stock,

K is the strike price,

r is the annual risk-free rate.

We have $C = \$7.2, S = \$50, K = \$55, r = 0.06, t = 1$. So

$$7.2 - P = 50 - 55 \cdot e^{-0.06 \cdot 1}$$

$$P = 7.2 + 1.797$$

$$P = 8.997 \approx 9$$

Answer: the value of a put option is $\$9$.