31/03/

1. A is thrice as good as B :

eg!   B did | Adid in
      in 30 days | 10 days

$B - \dfrac{B}{3}$ ⇒ 60

$\dfrac{3B - B}{3} = 60$

$\dfrac{2B}{3} = 60^{30}$

| B = 90 days | | A = 30 days |

| 1d = 1/90 | | 1d = 1/30 |

$\dfrac{1}{90} + \dfrac{1}{30}$ ⇒ $\dfrac{1 + 3}{90}$ ⇒ $\dfrac{4}{90}$ ⇒ | $\dfrac{90\ days}{4}$ |

⇒ 22.1/2 days

2.   A can do ... in ⇒ 4 hrs ⇒ 1/4 (1 hr work)

(B & C) together can do in ⇒ 3 hrs ⇒ 1/3 (1 hr work)

(A & C) can do   in ⇒ 2 hrs ⇒ 1/2 (1 hr work)

$\dfrac{1}{4} + \dfrac{1}{x}$ ⇒ $\dfrac{1}{2}$

x = 4 | C can do in 4 hrs |

| B & C |

$\dfrac{1}{y} + \dfrac{1}{4} = \dfrac{1}{3}$

$\dfrac{4 + y}{4y} = \dfrac{1}{3}$ | 12 + 3y = 4y
                                      | y = 12 hrs |