Latihan 5

1) $r = 60\ cm = 0,6\ m$
$T = 1,5$ sekon

* $v = \frac{0,6}{1,5}$
$= \frac{\cancel{6}}{\cancel{10}} \times \frac{\cancel{10}}{\cancel{15}_5} = \frac{2}{5} = 0,4\ m/s$ //

2) $n = 180$
$t = 1$ menit $= 60$ sekon
$r = 3\ m$
* $v = ?$
$f = \frac{n}{t} = \frac{180}{60} = 3\ Hz$

$v = r \times f$
$= 3 \times 3$
$= 9\ m/s$ //

3) $n = 3$
$t = 2$ detik

* $T = \frac{t}{n} = \frac{2}{3} = 0,667$ sekon //

$f = \frac{n}{t} = \frac{3}{2} = 1,5\ Hz$ //

4) a) $t = 8$ sekon
$\frac{1}{2} r = 4\ m = 8\ m$
$\pi = 2$

* $T = \frac{t}{n} = \frac{8}{2} = 4$

$v = \frac{r}{T} = \frac{8}{4} = 2\ m/s$ //

estudee

b) $\lambda = 1{,}5$
$s = 3$ meter
* $\lambda . x = s$
$x = \frac{s}{\lambda}$
$= \frac{3}{1{,}5} = \frac{3 \times 10}{15}$
$= 2$ meter

c) $L = 6m$
$n = 2$
$T = 1{,}5$ sekon
$V = ?$

* $n . \lambda = L$
$2 . \lambda = 6$
$\lambda = 3$ m

$V = \lambda / T$
$= 3 / 1{,}5$
$= 2$ m/s

5) a $\lambda = 3m$
$F = 150$ Hz
* $V = \lambda \times F$
$= 3 \times 150$
$= 450$ m/s

6) $1/2\ \lambda = 50$ cm
$\lambda = 100$ cm $= 1$ m
$F = 20$ Hz

* $V = \lambda \times F$
$= 1 \times 20$
$= 20$ m/s

estudee

Sistem Operasi

No.
Date

7) a) $n = 1,5$ getaran/detik
$t = 1$

* $F = \frac{n}{t} = \frac{1,5}{1} = 1,5$ Hz

b) $n = 2,5$
$t = 2$ sekon
$x = 6$ meter

* $T = \frac{t}{n} = \frac{2}{\frac{25}{10}} = \frac{2 \times 10}{1} \times \frac{}{25} = \frac{20}{25} = \frac{4}{5} = 0,8$ s

$V = \frac{Y}{T} = \frac{6}{0,8} = 7,5$ m/s