TB(2B) Ch. 11 Introduction to Trigonometry
Conventional Questions

1. [16-17 S.2 Final Exam #8]

Figure 2 shows two triangles *ABC* and *DEF*. Find θ and *DF*.   (**3 marks**)
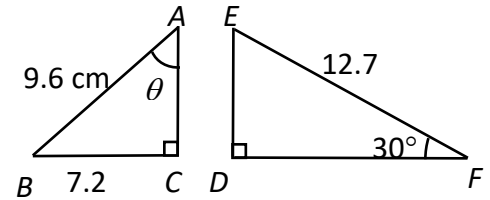

Figure 2

2. [17-18 S.2 Final Exam #6]

In **Figure 1**, *O* is a point on *AB* such that $OP \perp AB$. It is given that *AP* = 8 m, *OP* = 5 m, $\angle PBO = x$ and *AB* = 19 m.

Figure 1

(a) Find *OA*.   (**2 marks**)
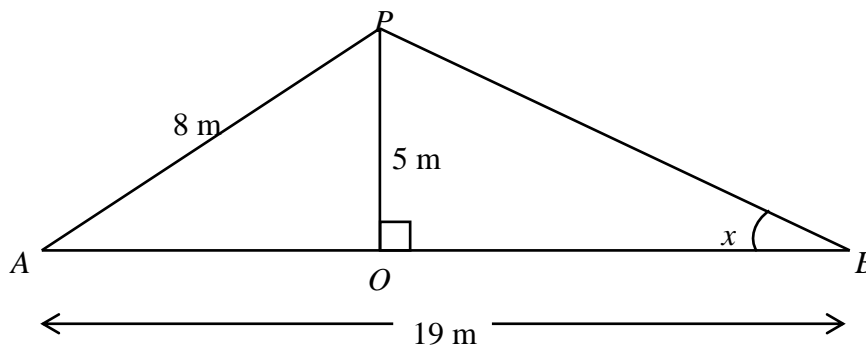
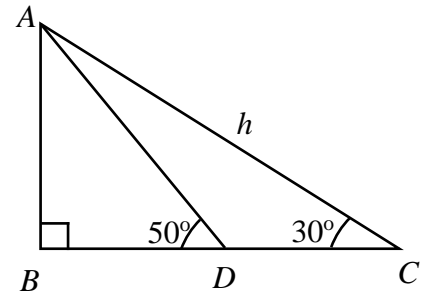(b) Find *x*.   (**2 marks**)

3. [17-18 S.2 Final Exam #12]

In **Figure 4**, $\triangle ABC$ is a right-angled triangle with $\angle B = 90°$, $\angle C = 30°$ and $AC = h$. D is a point on BC such that $\angle ADB = 50°$.

(a) Find AB in terms of h.   **(2 marks)**

(b) If $DC = 8$, find h.   **(2 marks)**
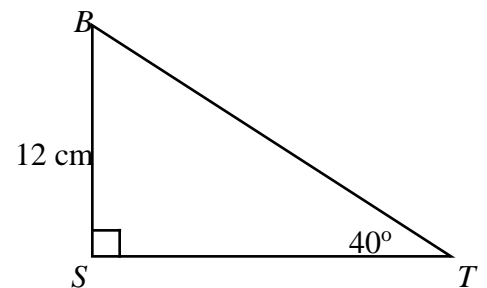

Figure 4

4. [18-19 S.2 Final Exam #7]

In **Figure 2**, $\triangle BTS$ is a right-angled triangle where $\angle S = 90°$, $\angle T = 40°$ and $BS = 12$ cm.

(a) Find TS.   **(2 marks)**

(b) Find the area of $\triangle BTS$.   **(1 mark)**
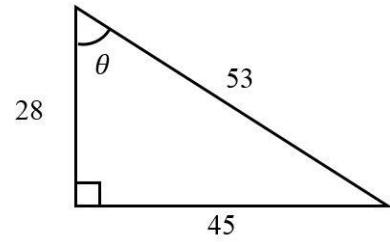

Figure 2

5. **[20-21 Final Exam #3]**

Refer to **Figure 3**, find the values of

(a) $\sin \theta$,   **(1 mark)**

(b) $\cos \theta$ and   **(1 mark)**

(c) $\tan \theta$.   **(1 mark)**

Give your answers in fraction.

Figure 3

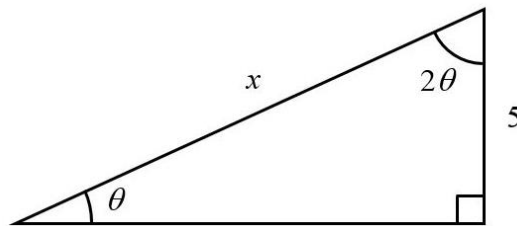**6.** **[20-21 Final Exam #15]**

Refer to **Figure 5**, find x.   **(3 marks)**

Figure 5

~ End ~