

Mobile Crane Operator (2024) Level 3

ACRONYMS AND ABBREVIATIONS

TERM	MEANING
ASME	American Society of Mechanical Engineers
CSA	Canadian Standards Association
LMI	Load moment indicator
OHS	Occupational Health and Safety
WLL	Working load limit

NOTE

Do **not** bring this document to your exam.

These acronyms and abbreviations will be included in the exam reference materials.

FORMULAS

Tension for slings of equal length	$\frac{Load \times Sling\ Length}{\#\ of\ Slings \times Hook\ to\ Load\ Height}$
Tension for slings of unequal length	$\frac{Load \times D_2 \times L_1}{(D_1 + D_2) \times H}$ <p style="text-align: center;">OR</p> $\frac{Load \times D_1 \times L_2}{(D_1 + D_2) \times H}$ <p><i>L = Sling length</i> <i>D = Distance from centre of gravity</i> <i>H = Hook to load height</i></p>
Inverse factor	$\frac{Opposite\ distance}{Total\ distance}$
Volume of cube	$Length \times Width \times Height$
Volume of cylinder	$\frac{3.14 \times Diameter \times Diameter \times Length}{4}$ <p style="text-align: center;">OR</p> $3.14 \times radius^2 \times Length$
Volume of pipe (thin wall)	$3.14 \times Diameter \times Length \times Thickness$
Pythagorean theorem	$a^2 + b^2 = c^2$

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